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**THE MORPHO-SYNTAX OF ASPECT
IN XIĀNG CHINESE**

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Key to abbreviations

1SG	first person singular
2SG	second person singular
3SG	third person singular
CL	classifier
DUR	durative marker
EM	exclamative marker
EXP	experiential marker
INCHO	inchoative marker
LOC	locative marker
MP	modal particle
NEG	negative marker
QM	question marker
SUB	subordinate marker
SFP	sentence final particle
PERF	perfective marker
PL	plural marker
PROG	progressive marker

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Chapter 1. Introduction

1.1 Basic introduction

The purpose of this thesis is twofold. On the one hand, I investigate the morpho-syntax of the aspectual system in one variety of Xiāng (namely: Chángshā), which is one of the ten sub-families¹ of Chinese (which are Mandarin, Xiāng, Gàn, Wú, Yùè, Hakka, Mǐn, Pínghuà, Jīn, and Huī). In this context, I provide a detailed description and analysis of the aspect system of the Xiāng variety of Chángshā. On the other hand, I conduct the analysis from the perspective of general theories on inner and outer aspect, and the interaction between them, with the intention to contribute to the development of these more general ideas.

1.1.1 The language, its speakers and its major properties

Xiāng is a group of linguistically similar and historically related varieties of Chinese, spoken mainly in Húnán province but also in parts of Guǎngxī, Sīchuan and Shānxī. Scholars divide Xiāng into Old Xiāng and New Xiāng according to the degree to which it has been influenced by Mandarin. Old Xiāng is influenced less by Mandarin than New Xiāng. Xiāng is further divided into five subgroups according to phonological features each variety has: Cháng-Yì Lóu-Shào, Hángzhōu, Chén-Xù and Yǒng-Quán. The language I investigate in this thesis, Chángshā, belongs to Cháng-Yì.

¹ Classification of the dialect groups has varied. The classification widely adopted divides Chinese into seven regional groups: Mandarin, Wu, Gan, Xiang, Min, Yue, and Hakka (Yuan 1961). Three more regional groups have been proposed in 1980s: Jin, Hui and Pinghua. The dialect groups all have their own distinct phonological features, dialect specific vocabulary, and distinctive grammatical characteristics, to the extent that they are not mutually intelligible. The status of the newly proposed regional varieties is still being debated (Li 1989, Kurpaska 2010).

As to the distinction between Old Xiāng and New Xiāng, Old Xiāng varieties (with about 11.5 million speakers), are more conservative, have in general kept the voiced initials of Middle Chinese. For instance, Lóu-Shào, also known as typical Old Xiāng, exhibits the three-way distinction of the Middle Chinese obstruents, preserving voiced stops, fricatives and affricates, while the New Xiāng varieties have altogether lost them and changed them to voiceless unaspirated consonants. According to Norman (1988), Xiāng Chinese belongs to what he calls the middle group of varieties of Chinese. This group, also consisting of Gàn and Wú, originally belonged to the southern group but through many centuries of south-bound migration, has been heavily influenced by Northern varieties of Chinese, that is, Mandarin.

Chángshā is one of the New Xiāng varieties with approximately 17.8 million speakers. But the number is decreasing. Most of the local children do not speak Chángshā dialects. The Chángshā dialect is spoken predominantly in the city of Chángshā, which is the capital of Húnán province, and its neighboring suburbs.

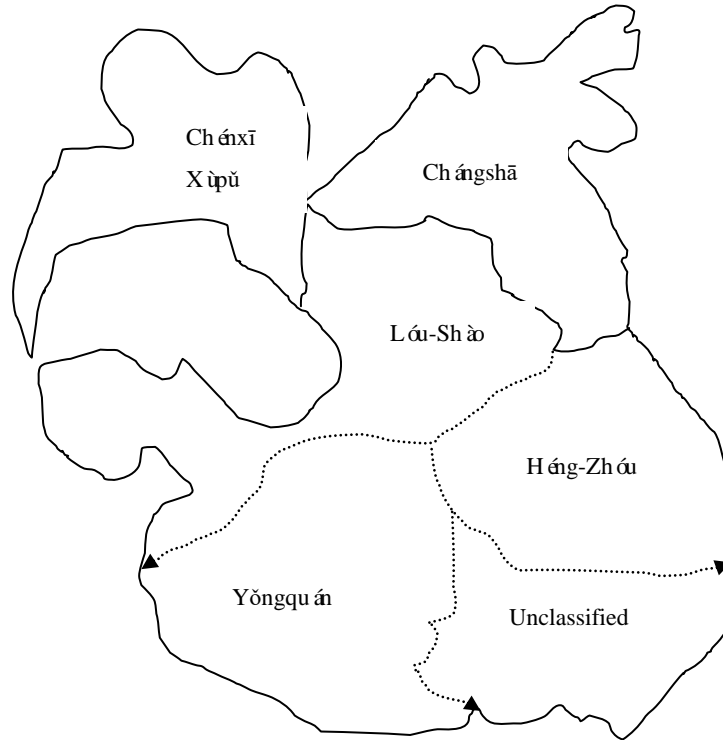
Chénxī and Xùpǔ Xiāng, which will be investigated as well, are spoken in western Húnán by about 3.4 million speakers. Chénxī and Xùpǔ Xiāng belong to Old Xiang. They are geographically separated from the New Xiāng dialects.

The location of Xiāng is shown in Map 1, from the *Language Atlas of China* (2012). The distribution of Chángshā, Xùpǔ, Chénxī and other subgroups of Xiāng dialects are shown in Map 2, from Bǎo and Chén (2007).

Map 1. The distribution of Chinese dialects from the *Language Atlas of China* (2012)



Map 2 The distribution of Chángshā, Xùpǔ, Chénxī and other subgroups of Xiāng dialect from Bǎo and Chén (2007).



The Xiāng dialects share many grammatical properties with other varieties of Chinese: the basic word order is SVO, nouns are not inflected for case, gender and number, verbs are not inflected for tense and different types of aspects are marked by particles. There are 5 types of aspects: perfective, progressive, durative, experiential and prospective aspect. There are five tones in Chángshā, as indicated in table 1. Table 2 lists the initials and finals of the language.

Table 1. Tones of Chángshā (from Wǔ 1999)

yin ³³ ping ⁴¹ tone	33	高	kau ³³	'tall'
yang ¹³ ping ⁴¹ tone	13	穷	tɕin ¹³	'sky'
shang ²¹ tone	41	口	k ^h əu ⁴¹	'poor'
yin ¹³ qu ⁴⁵ tone	45	菜	ts ^h ai ⁴⁵	'vegetable'
yang ⁴¹ qu ⁴⁵ tone	21	坐	tso ²¹	'to sit'
ru ⁴¹ tone	24	六	ləu ²⁴	'six'

Table 2. The initials and finals of Chángshā dialect (from Wǔ 1999)

Initials	Examples		
p	布	pu ⁴¹	'cloth'
p ^h	派	p ^h ai ⁴⁵	'sent'
m	马	ma ⁴¹	'horse'
f	肥	fei ¹³	'fat'
t	多	to ³³	'many'
t ^h	他	t ^h a ³³	'he'
l	来	lai ¹³	'come'
tɕ	砖	tɕye ³³	'brick'
tɕ ^h	穿	tɕ ^h ye ³³	'wear'
ŋ	女	ŋy ⁴¹	'female'
ɕ	新	ɕin ³³	'new'
k	歌	ko ³³	'song'
m	马	ma ⁴¹	“horse”
n	你	ni ⁴¹	'you'
x	喊	xan ⁴¹	'shout'
ts	栽	tsai ³³	'plant'
ts ^h	菜	ts ^h ai ⁴⁵	'vegetable'
s	死	si ⁴¹	'die'
z	人	zən ¹³	'people'

Finals

i	洗	ɕi ⁴¹	'wash'
u	不	pu ²⁴	'not'
y	猪	tɕy ³³	'pig'
a	爬	pa ¹³	'crawl'
ia	吃	tɕia ²⁴	'eat'
ua	挂	kua ⁴⁵	'hang'
ya	抓	tɕya ³³	'catch'
iɛ	叶	iɛ ²⁴	'leaf'
ɛ	姐	tɕɛ ⁴⁵	'sister'
ɣ	车	ts ^h ɣ ³³	'car'
uɣ	国	kuɣ ²⁴	'country'
o	哥	ko ³³	'brother'
io	脚	tɕio ²⁴	'foot'
ai	买	mai ⁴¹	'buy'
uai	快	k ^h uai ⁴⁵	'fast'
yai	帅	ɕyai ⁴⁵	'handsome'
uei	鬼	kuei ⁴¹	'ghost'
yei	水	ɕyei ⁴¹	'water'
au	高	kau ³³	'tall'
iau	要	iau ⁴⁵	'want'
iɛ̃	盐	iɛ̃ ¹³	'salt'
yɛ̃	穿	tɕh yɛ̃ ³³	'wear'
ĩ	闪	sĩ ⁴¹	'spark'
õ	短	tõ ⁴¹	'short'
an	三	san ³³	'three'
ian	羊	ian ¹³	'sheep'
uan	关	kuan ³³	'close'
yan	装	tsyan ³³	'load'
ən	中	tsən ³³	'middle'
in	冰	pin ³³	'ice'
uən	问	uən ²¹	'ask'
yn	群	tɕyn ¹³	'a group of'

This thesis will discuss some interesting, and within Xiāng also unique, properties Chángshā displays with respect to its aspect particles, especially the fact that one marker is used to express two quite different aspects.

1.1.2 Previous linguistic studies on Xiāng

Extensive investigation of the Xiāng dialect started in 1997, when a series of grammar books on Xiāng dialects was published (Cuī 1998, Hè 1999, Bào 1999, Peng Z.Run & Peng J.Guo 2013 among others). The series in question aims at providing a detailed documentation of the Xiāng dialects. Other works include Li (1990), which provides a detailed description of the vocabulary of Chángshā; Wǔ (1990), which focuses on the description of the aspect system in Chángshā; Wǔ (1999), which is the most comprehensive investigation of the grammatical system of Xiāng to date; Wǔ (2005), which provides, in English, a synchronic and diachronic study of the grammar of the Xiāng dialects; and Lú (2007), a grammar of Xiāng written in Mandarin.

It is widely assumed that the syntactic structure of Chángshā is similar to Mandarin (Lú 2007, Wǔ 2010). Little attention has been paid to the analysis of the syntactic properties of Chángshā.

Most of the previous works are concerned with the comparison of the differences between Mandarin and Xiāng, rather than recognizing the idiosyncratic properties in a more general sense or in their own right. Take the expression of aspectual meaning as an example. That one aspect marker is used to express more than one meaning or that more than one element is sometimes needed to express an aspect type has aroused very little attention. It is our purpose to provide an analytical account of the aspectual system in Chángshā (and Xiāng more generally).

1.1.3 Aim of the dissertation

This thesis investigates two particles in Chángshā, ta^{21} and ka^{41} . The former, ta^{21} , is involved in the expression of two types of aspect, which are normally thought of as quite different, imperfective (or even progressive), and perfective; the latter, ka^{41} , is a particle that is often characterized as a perfective particle,

but most of the time it is accompanied by ta^{21} . Example (1) shows ta^{21} as a perfective particle.

- (1) tsan³³ san³³ k^han⁴⁵ ta²¹ la⁴⁵ pən⁴¹ xy³³.
 read TA that CL book
 'Tsansan read (in) that book.'
 Or: 'Tsansan read that book (fully).'

In (2) we see the same particle, ta^{21} , in sentences with a progressive interpretation. It co-occurs with the element $tsai^{21}ko^{24}$. If this element occurs in preverbal position, ta^{21} is optional, if we find it in sentence final position, ta^{21} is obligatory.

- (2) a. ɲo⁴¹mən tsai²¹ko²⁴ ta⁴¹ (ta²¹) ma¹³tɕian⁴¹.
 1PL TSAIKO play TA mahjong
 'We are playing mahjong.'
 b. t^ha³³ k^han⁴⁵ *(ta²¹) tian⁴⁵shi⁴¹ tsai²¹ko²⁴.
 3SG watch TA television TSAIKO
 'He is watching TV.'

In (3) we see that ka^{41} , often analyzed as a perfective marker, cannot operate without ta^{21} .

- (3) a. tsan³³san³³ k^han⁴⁵ ka⁴¹ *(ta²¹) la⁴⁵ pən⁴¹ xy³³.
 read KA TA that CL book
 'Tsansan read that book (fully).'
 b. Tsan³³san³³ k^han⁴⁵ ka⁴¹ la⁴⁵ pən⁴¹ xy³³ *(ta²¹).
 read KA that CL book TA
 'Tsansan has read that book (fully).'

In view of these observations, I formulate the following questions to be dealt with in this thesis:

- a) What is the interpretation and distribution of ta^{21} ?

- b) How can we account for the observation that in Xiāng, or in any case in the Chángshā variety of it, the same particle can be involved in the expression of different aspectual meanings?
- c) What is the interpretation and distribution of *ka*⁴¹?

In what follows I first provide an introduction to the theoretical tools used in this thesis in section 1.2, which includes a discussion of tense and viewpoint aspect (or outer aspect) and situation aspect (or inner aspect) in Mandarin. We will see that there are reasons to assume that there are three inner aspect positions in Mandarin. In section 1.3, I provide an overview of this thesis.

Source of the data

The data in this thesis mainly come from the existing literature and the fieldwork I carried out, supplemented by data of my own (based on my own linguistic intuitions, all checked with natives). I have two main informants: one is a female native of Chángshā, 60 years old, with a primary school diploma; another is a male native of the same city, 50 years old, with middle-school diploma. The fieldwork involved different approaches: (i) direct elicitation of sentences, with the informants explaining the meaning of each element of the sentences investigated; (ii) soliciting grammaticality judgments of existing sentences (with special attention to meaning and use in context).

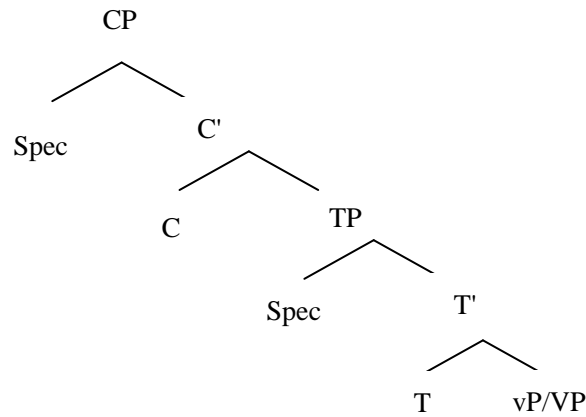
1.2 Theoretical background

In this section, I am going to introduce some theoretical tools that I will use in the present dissertation. I mainly focus on two notions and the way of expressing them in Mandarin. One is tense and another is aspect. I am going to show different ideas on tense and aspect in Mandarin and I will point out which theories I am going to adhere to.

1.2.1 Tense in Mandarin

Any situation in the real world represented in language is located in time by relating the time of the situation to the time of the utterance (in Reichenbach 1947 and Klein 1994, the relation between the time of the situation and the time of the utterance is indirect as it is mediated by Reichenbach's reference time or Klein's topic time; we will not dwell on this, as it plays no role in this dissertation). Languages may make use of various ways to express this relation. The temporal information of a sentence can be expressed through aspectual markers, temporal adverbials or other categories, such as tense. Here we define tense as a grammaticalized category used to locate a situation in time (Klein 2009). Tense may be realized by verbal inflection. For instance, in English, the form *V-ed* is used to indicate that the situation described by the verb happened in the past. There are three basic tenses: past tense, present tense and future tense. In past tense, the situation happens before the speech time, in present tense, the situation takes place at the speech time, and in future tense, the situation happens after the speech time. Structurally, tense is generally assumed to head its own projection, TP (Pollock 1989; Belletti 1990; Chomsky 1991; Chiu 1993; Haegeman 1994; Bobaljik & Jones 1996; Radford 1997; Li 1999, 2007). Above TP is the projection headed by the complementizer, CP. The structure in (4) shows where in the structure the TP is generally assumed to be.

(4)



Not all languages indicate tense through verbal inflection. In Mandarin, verbs are not inflected for tense. Whether this language has tense as defined above, that is associated with a structural position (the head of TP) has been a hot topic. Some researchers claim that Mandarin is a tenseless language (Li & Thompson 1981; Klein Li Ping and Henri äte Hendricks 2000; Klein 1994; Hu, Pan & Xu 2001; J.W.Lin 2002, 2003, 2006; Smith & Erbaugh 2005; Mei 2002; among others). The main reason for this claim is that there is no morphological marking of a past/non-past distinction in the language. According to them, the temporal interpretation of a sentence is determined by aspectual markers, temporal adverbs, the aspectual nature of the predicate by the context. On the other hand, there are other linguists, like Li (1990), Huang (1982, 1998), Sybesma (2003, 2004, 2007), Lin (2003), Tsai (2008), and Di (2007) among others who argue that Mandarin is a language with structural (or syntactic) tense. The main reasons vary from the observation that the distribution of some temporal phrases or the temporal interpretation of some sentences can only be understood under the assumption of an active tense node, to the identification of the finiteness/nonfiniteness contrast.

In the following, I will introduce some of the analyses related to the question of tense in Mandarin. I will start the introduction with arguing for the existence of the finiteness/nonfiniteness distinction in Mandarin. Finite clauses are traditionally identified with tensed sentences, and non-finiteness clauses are

sentences with no tense. Recently, different views of the relation between tense and finiteness have been presented; see Nikolaeva (2007), Ladislav (2010), Kristin (2016) among others. However, in the present thesis, I assume, following the traditional idea, a finite sentence is a sentence with its own temporal reference, which is temporally anchored onto the context (see Enç 1987; Guéron & Hoekstra 1995; Bianchi 2002; Sybesma 2017 among others). In this definition, the encoding of finiteness depends on the presence of tense. Consequently, if, despite the fact that in Mandarin, neither finiteness nor tense is overtly marked, we can show that the finiteness/nonfiniteness distinction exists nonetheless, we also have shown that Mandarin has tense.

In the literature, many researchers have explored the finite/nonfinite contrast in clauses in Mandarin (see Huang 1982; Li 1990; Tang 1990; Tsai 1995; Paul 2002; Di 2007; Lin 2011, among others). Huang (1982, 1998) points out that though not overtly marked, finiteness can be identified in certain syntactic operations. Huang's argument mainly comes from the distribution of lexical subjects as opposed to non-overt subjects. See (5) - (6) (from Huang 1998:189).

- (5) a. Zhāngsān shuō [(tā) lái le].
 say 3SG come PERF
 'Zhangsan said that (he) came.'
- b. Zhāngsān xiāngxìn [(tā) huì lái].
 believe 3SG will come
 'Zhangsan believes that (he) will come.'
- (6) a. wǒ bǐ Lisi [PRO lái].
 1SG persuade Lisi come
 'I persuade Lisi to come.'
- a'. Lisi zhǔnbèi [PRO lái].
 Lisi prepare come
 'Lisi prepared to come.'

- b. *wǒ bī Lisi [tā lái].
 1SG persuade Lisi 3SG come
 b'. * Lisi zhǔnbèi [tā lái].
 Lisi prepare 3SG come

The embedded subjects in (5) can be null or non-null, but in (6) they must be null. The question is how we can explain the differences between (5) and (6). The basic assumption is lexical subjects in (5) must be licensed, per the Case Filter in (7) (Chomsky 1981).

(7) Case Filter

*NP if NP has phonetic content and has no Case.

According to the Case Filter, an overt NP must be assigned Case to license it. The subject of a clause is assigned case only if it is in a certain configurational relation with the head of a functional projection, which used to be called "INFL" or "AUX" (Huang 1989:188), consequently called I, being the head of IP, which in turn was later split into several different functional projections, such as TP and AgrP (see e.g., Chomsky 1980, 1981). If we assume that the Case Filter applies to Mandarin just like any other language and subject Case is assigned in a uniform way in languages of the world, the fact that Chinese sentences can have overt subjects must then lead to the conclusion that Chinese also has an IP (or TP or AgrP). Huang, following Chomsky and standard assumptions, assumes that there are finite and non-finite IPs: the former can license the subject but the latter cannot, in that case there cannot be an overt subject.

Based on George and Kornfilt (1981), who claim that different languages may encode finiteness with different elements of AUX, a cover term for aspect markers and modals, Huang suggests that the potential occurrence of any element of the AUX category in a sentence can be used to argue for the existence of the finiteness/nonfiniteness distinction. Huang classifies verbs into two types: one type of verbs are those verbs like *shuō* 'say' and *xiāngxìn* 'believe' presented in (5), and another type are the so-called control verbs like *zhǔnbèi* 'prepare', *bī* 'force' presented in (6). Huang argues that the

finiteness/nonfiniteness distinction can be seen between these two types of verbs. The main evidence is the observation that the embedded clauses after *xiāngxìn* 'believe' type verbs can contain aspect markers or modals, as can be seen in (5), while the control verbs cannot, which are presented in (8) - (9). (8) - (9) are from (Huang 1998:189) with some modification.

- (8) a. wǒ zhǔnbèi [PRO lái].
 1SG prepare come
 'I prepared to come'
- b. *wǒ zhǔnbèi [PRO hù/ néng/yīnggāi lái].
 1SG prepare will/ can/ should/ come
- (9) a. wǒ bī Lisi [PRO lái].
 1SG force Lisi come
 'I forced Lisi to come.'
- b. *wǒ bī Lisi [lái zhe/ guo/ le].
 1SG force Lisi come DUR/ EXP/PERF

The embedded subjects in (8) - (9) cannot co-occur with modals and aspect markers. They are different from those in (5) in which aspect markers (as in (5a)) and modals (as in (5b)) can be used. Following George and Kornfilt (1981), Huang (1989) proposes that in Mandarin, a clause is finite if it contains an AUX. The comparison shown in (5) where aspect markers and modals can be used, and (8) - (9) where no modals or aspect markers are acceptable indicates that the finiteness/nonfiniteness distinction exists in Mandarin.

Huang further points out that AUX may contain constituents such as modals or aspect markers, or it may have the form of a zero-morpheme. For instance in (10), where although the sentence is not overtly marked in AUX, the embedded subject can be lexical. The assumption is that the habitual aspect has the form of a zero-morpheme (Huang 1998:190).

- (10) Zhāngsān shuō [(tā) měitiān Ø lái].
 say 3SG everyday ASP come
 'Zhangsan said that (he) comes/came every day.'

As represented above, Huang argues for the existence of the finiteness/non-finiteness distinction in Mandarin based on the fact that some embedded clauses can contain overt subjects as well as modals or aspect markers like *huì* 'will', while others cannot. However, there are linguists who argue against it (Xu 1985, 1986; Hu, Pan and Xu 2001). For instance, Xu (1985, 1986) argues that the ungrammaticality of (8b) does not originate from the nonfinite status of the embedded clause but from the semantic incompatibility between the modality of uncertain possibility and a planned event, since *huì* 'will' in Mandarin denotes not only futurity, but also possibility and uncertainty (Hu, Pan and Xu 2001:112). They point out that if *huì* 'will' denotes possibility, the ungrammaticality in (8b) is expected: there is a semantic contrast between *huì* 'will' that indicates an uncertain possibility and *zhǔnbèi* 'prepare' which indicates a planned event. However, according to us, this conclusion is not necessarily correct. For instance, the verb *shěfǎ* 'try', which indicates an uncertain event, is not semantically incompatible with *huì* 'will', but the sentence is still ungrammatical. See (11b).

- (11) a. wǒ shěfǎ [PRO míngtiān lái]
 1SG try tomorrow come
 b. *wǒ shěfǎ [PRO míngtiān huì lái]
 1SG try tomorrow will come
 'I try to come tomorrow.'

In (11a), the verb *shěfǎ* 'try' is used and the embedded subject is null, and the sentence is grammatical. However, if the embedded clause contains the modal verb *huì* 'will', as in (11b), the sentence becomes ungrammatical. This indicates that semantics is not the factor that causes (8b) to be ungrammatical.

The existence of the distinction between finiteness and nonfiniteness is further argued for by Li (1985, 1990). Li (1985, 1990) suggests that the difference between finiteness and nonfiniteness in Mandarin can be evidenced by the co-occurrence of time adverbials and aspectual markers, the licensing of negative polarity items, and the realization of aspect (Li 1990:17). I introduce one of her arguments: the differences shown by the two types of verbs

(*tell*-verbs and *persuade*-verbs) with respect to the collocation of a temporal adverb and aspect markers.

Li observes that the collocation of the time adverbial *cóngqián* 'before' and aspectual marker *guo* indicating experiential aspect ('EXP') is constrained by the same-clause condition. See (12).

- (12) a. wǒ cóngqián gào sù guo tā [nǐ lái zhèr].
 1SG before tell EXP 3SG you come here
 'I told him before you came here.'
- b. *wǒ cóngqián gào sù tā [nǐ lái guo zhèr].
 1SG before tell 3SG you come EXP here
- c. wǒ cóngqián qǐng tā [chī guo fàn]
 1SG before invite 3SG eat EXP meal
 'I invited him to eat before.'

(12a) is grammatical since *cóngqián* 'before' and *guo* 'EXP' occur in the same clause. In (12b), *cóngqián* 'before' and *guo* 'EXP' appear in different clauses, and the sentence is ungrammatical. According to Li, this ungrammaticality results from the violation of the same-clause condition. What is interesting is (12c): *cóngqián* 'before' and *guo* 'EXP' occur in different clauses, but the sentence is grammatical. Li argues that (12c) can be accounted for if one assumes the *guo* 'EXP' in the sentence need not be interpreted in the embedded clause. She points out that the sentence does not mean that the person has actually accepted the invitation and eaten the meal; the sentence only ensures that I have invited him before. *Cóngqián* and *guo* are interpreted as if they are in the same clause. The interpretation of (12c) can be the same as that of (13).

- (13) wǒ cóngqián qǐng guo tā chī fàn.
 1SG before invite EXP 1SG eat meal
 'I invited him to eat before.'

However this cross-clause interpretation is not possible for *tell*- verbs.

- (14) a. wǒ g àosù tā tāmen jì è guo yān, tāmen dōu
 1SG tell 3SG 3PL give up EXP cigarette 3PL all
 bu z ǎi chōuyān le.
 NEG again smoke SFP
 'I told him that they once gave up smoking. They never smoked again.'
- b. *wǒ c óngqi án g àosù tā tāmen jì è guo yān.
 1SG before tell 3SG 3PL give up EXP smoking

In (14a), the use of *guo* in the embedded clause indicates that the event expressed by the embedded clause has happened. (14b) is ungrammatical. What Li observes is that the cross-clausal aspectual relation is possible with sentences containing *persuade*-verbs but not with *tell*-verbs (Li 1990:20): in the one case the boundary between the matrix and the embedded clause is transparent while in the other it is not. And it is exactly with verbs that have nonfinite embedded clauses according to Huang's conclusions above where the boundary is transparent and those verbs selecting a finite clause for which it is not.

The above are the two analyses arguing for the existence of finiteness in Mandarin. As mentioned earlier, we take a finite sentence as one with its own temporal reference; the encoding of finiteness depends on tense (which may in some cases be strengthened by a temporal adverb). In Mandarin, both finiteness and tense are not overtly marked. However, this does not mean that there is no tense in Mandarin. The analyses provided by Huang and Li show that in Mandarin, we do find a distinction between finiteness and non-finiteness. Then according to our definition, this language must have tense as well.

Establishing a distinction between finiteness and nonfiniteness is only one of the approaches to argue for the existence of structural tense in Mandarin. Other linguists, such as Sybesma (2003, 2004, and 2007); Z.H.Lin (2003), and others argue for the existence of tense from either the perspective of the interpretation of temporal reference or the distribution of certain temporal phrases. In the following I introduce Z.H. Lin (2003) and Sybesma (2003, 2004, 2007).

Z.H.Lin (2003) proposes that there is a syntactic tense category in Mandarin in the form of an empty Op(erator), receiving a value from a c-commanding binder. His main argument comes from the effect of the temporal modifier *yǐqián* 'before' on the temporal interpretation of the sentence. The influence of *yǐqián* on the sentences results from its two properties. Firstly, Lin claims that *yǐqián* can optionally take a time argument. The interpretation of the sentence in which *yǐqián* 'before' appears varies depending on whether the time argument of *yǐqián* is present. With the time argument, the interpretation of the sentence can be generic or episodic (15a) - (15d); without the time argument, the sentence can only be interpreted as generic (16a) - (16d). (15) - (16) are from Lin (2003:9).

- (15) a. Lǎowáng sān nián yǐqián chōu xuějiā. (Generic)
 three year yiqian smoke cigar
 'Laowang smoked cigars three years ago.'
- b. Lǎowáng sān nián yǐqián qù le Táiběi. (Episodic)
 three year yiqian go PERF Taipei
 'Laowang went to Taipei three years ago.'
- c. sān nián yǐqián-de Lǎowáng chōu xuějiā. (Generic)
 three year yiqian-SUB Laowang smoke cigars
 '(Lit.) Laowang of ten years ago smoked cigars.'
- d. sān nián yǐqián-de Lǎowáng (yǐjīng) sǐ le. (Episodic)
 three year yiqian-SUB Laowang already die PERF
 (xiànzài nǐ kàndào-de búshì tā běnrén.)
 now 2SG see SUB be-not 3SG own
 '(Lit.) Laowang of ten years ago (already) died; the one you see is not real him.'
- (16) a. Lǎowáng yǐqián chōu xuějiā. (Generic)
 yiqian smoke cigar
 'Laowang smoked cigars in the past.'
- b. *Lǎowáng yǐqián qù le Táipěi. (INTENDED: Episodic)
 yiqian go PERF Taipei
 '(Lit.) Laowang went to Taipei in the past.'

- c. *yǐqián-de* Lǎowáng chōu xuějiǎ. (Generic)
 yiqian-SUB Laowang smoke cigar
 '(Lit.) Laowang of the past smoked cigars.'
- d. **yǐqián-de* Lǎowáng qù le Táipěi. (INTENDED: Episodic)
 yiqian-SUB Laowang go PERF Taipei
 '(Lit.) Laowang of the past went to Taipei.'

In (15a, b) and (16a, b), *yǐqián* 'before' is used as a sentential adverb occurring between the subject and the predicate; in (15c, d) and (16c, d), it is part of the subject, used as a nominal modifier with a modification marker *de*. In (15), the time argument is used and the sentences can be interpreted as generic or episodic. In (16), the time argument is not used and the sentence can only be interpreted as generic.

Secondly, Z.H.Lin holds that *yǐqián* 'before' affects the temporal interpretation of the sentence when it occurs in a predicate-external position (i.e., subject or adverbial position). It has no influence on the temporal interpretation of the sentence when it occurs in the object position. (17) is from Z.H.Lin (2003:13).

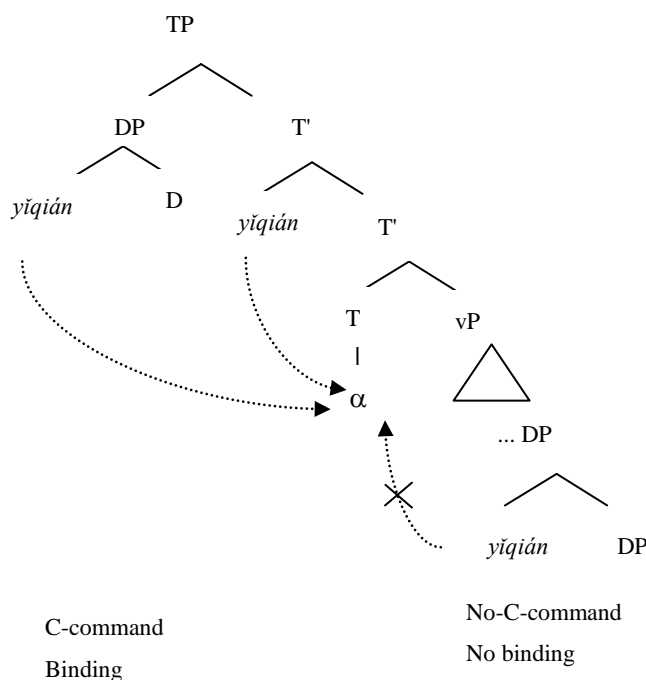
- (17) a. *yǐqián-de* Lǎowáng xǐhuān gǒu. (Holds true in the past)
 yiqian SUB like dog
 '(Lit.) Laowang of the past liked dogs.'
- b. Lǎowáng *yǐqián* xǐhuān gǒu. (Holds true in the past)
 yiqian like dog
 'Laowang liked dog in the past.'
- c. Lǎowáng xǐhuān *yǐqián de* gǒu. (Holds true at the speech time)
 like yiqian SUB dog
 '(Lit.) Laowang likes the dogs of the past.'

In (17a) - (17b), in which *yǐqián* 'before' occurs external to the predicate (as a modifier of the subject nominal and as a sentential adverb respectively), the state of *xǐhuān* 'like' holds true in the past. In (17c), *yǐqián* occurs internal to the predicate (modifying the object nominal), and the state of 'like' holds true at the speech time.

To account for the influences of *yǐqián* 'before' on the interpretation of the sentences, Z.H.Lin proposes that *yǐqián* 'before' projects a maximal projection, $yǐqián^{Max}$, with *yǐqián* occupying the head of this maximal projection, and the time argument in Spec of $yǐqián^{Max}$. The whole projection occupies an adjunct or adverbial position depending on whether it is used as a nominal modification or an adverb. In this structure, if the time argument is present, *yǐqián* 'before' denotes a specific point in the past. If not, the denotation of *yǐqián* 'before' will remain vague, and it will simply denote some unidentified interval of time in the past (Lin 2003:15). With this proposal, the generic/episodic reading of the sentences can be accounted for: if the time argument is present, *yǐqián* 'before' denotes a specific interpretation. Since a specific point of time is a prerequisite for the episodic interpretation of a sentence (Z.H.Lin 2003:15), the sentence with *yǐqián* 'before' and its time argument will be interpreted as episodic. If the time argument is not present, *yǐqián* 'before' will simply denote some unidentified interval of time in the past. That is why the sentence can only be interpreted as generic.

As for the influence that *yǐqián* 'before' has on the temporal reference of the sentence, Lin suggests that they result from the interaction of *yǐqián* 'before' and an empty operator, which according to him, occupies the head of a functional projection, the category Tense. The operator must be valued; it can either be valued by the discourse context or by some temporal expression in the same sentence which c-commands it. In the sentences above, *yǐqián* 'before' functions as the temporal expression. It values the empty tense operator when it c-commands it. For instance, in (17a), *yǐqián* 'before' occurs as a modifier of the subject nominal, it is adjoined to the subject DP. Z.H.Lin, following Kayne (1994), suggests this subject-modifying *yǐqián* 'before' occupies the highest position in the TP and c-commands the empty tense operator (Z.H.Lin 2003:20). It hence binds the empty tense operator and assigns past-time interpretation to it. In (17b) it is used as a sentential adverb, occurring between the subject and the predicate of the sentence, and the effect of assignment is the same. However, if it is an object-modifier, in a predicate-internal position, *yǐqián* does not c-command the tense operator, thus it cannot determine the value of the empty tense operator (17c) (Z.H.Lin 2003:21). The configuration Lin (2003) assumes is presented in (18) with some modification.

(18)



In Z.H.Lin (2003), the head of the T is occupied by an empty operator. In the rest of this dissertation, we accept the analysis of temporal interpretation of Chinese in Lin (2003), but we assume, following Sybesma (2004, 2007) (as will be introduced shortly), that the head of T in Mandarin is occupied by a pronominal variable α . Hence in (18), we replace Op in Lin (2003) with α in the sense of Sybesma (2004, 2007).

Z.H.Lin (2003) is not the only one who argues for the existence of tense in Mandarin. Sybesma (2003, 2004, and 2007) also argues for the idea that Mandarin sentences contain a T-node. As we just saw, the head of this TP is supposedly occupied by a pronominal variable, the interpretation of which is determined partly by the nature of the verb phrase (with an endpoint or not, stative or not) and partly through temporal adverbs and elements in the C-domain of the sentence. The first argument given by Sybesma (2007) is concerned with general theoretical considerations. Following Enç (1987),

Giorgi and Pianesi (1997), Guéron and Hoekstra (1995) and Klein (1994), who claim that without a T node, the temporal interpretation of a sentence would be impossible, Sybesma assumes that that is applicable to all natural languages, which means that sentences in Mandarin will also contain a T node (Sybesma 2007:581).

Secondly, Sybesma, following an argument made by Matthewson (2002), argues that we can actually observe a T node in Mandarin. See (19) (from Sybesma 2007:582).

- (19) a. Zhāngsān zhù zài zhèr.
 live at here
 'Zhangsan lives here.'
 b. Zhāngsān 1989 nián zhù zài zhèr.
 1989 year live at here
 'Zhangsan lived here in 1989.'

The sentence in (19a) can only have a present tense interpretation. The sentence in (19b), with the temporal adverb gets a past tense interpretation. Importantly, if the subject of (19a) is a deceased person, the sentence is infelicitous in the same way an English sentence like *Winston Churchill lives here* is infelicitous. What this means is that the temporal interpretation of a sentence like (19a) can be set differently using linguistic material like an adverbial, but cannot be manipulated using non-linguistic knowledge. Since the temporal interpretation can only be reset using linguistic material, the source of the temporal interpretation must also be linguistic. Sybesma concludes from this that the structure of a Chinese sentence must contain a T-node. For a more detailed analysis, see Sybesma (2003, 2004, and 2007).

To sum up briefly, above, we have introduced different types of analyses arguing that syntactic tense exists in Mandarin. There are however, others who have argued against the existence of tense in Mandarin. As we have seen above, Xu (1982) and Hu, Pan and Xu (2001) have reasons to believe that finiteness is not a notion relevant for Chinese and consequently cannot be used to argue for the existence of Tense in Mandarin. We now continue to introduce the analysis in J.W.Lin (2002, 2003), who argues against the existence of a TP in Mandarin.

As many others, J.W.Lin (2002, 2003) builds his main argument on the observation that Mandarin lacks verbal morphology to express the distinction between present tense and past tense. He claims the nature of the predicate plays an important role in the temporal interpretation of a sentence (J.W.Lin 2003:261). (20) - (21) are taken from J.W.Lin (2003:261).

- (20) a. tā dǎpò yī gè huāpíng.
 3SG break one CL flowervase
 'He broke a flower vase.'
- b. tā bǎ wǒ gǎn chū jiàoshì
 3SG BA 1SG drive out classroom
 'He drove me out of the classroom.'
- c. tā zài Shànghǎi chūshēng.
 3SG in Shanghai be.born
 'He was born in Shanghai.'
- (21) a. tā hěn cōngmíng.
 3SG very clever
 'He is very clever.'
- b. wǒ xiāngxìn nǐ.
 1SG believe you
 'I believe you.'

The temporal references in (20) are the past and those for (21) are the present. There is no verbal inflection indicating the temporal references, the tenses in these sentences are valued through the situational properties. J.W.Lin builds his analysis on the work by Bohnemeyer and Swift (2001), who assume that there is a certain correlation between the telicity of an eventuality description and its aspectual viewpoint. That is, the default aspectual viewpoint of a telic event is perfective, while the default aspectual viewpoint of an atelic event is imperfective. Under this assumption, a telic predicate like *chī yí gè pínáguǒ* 'eat an apple' is interpreted as perfective, whereas *run in the park* is imperfective. Basing himself on Bohnemeyer and Swift's (2001) notion of default aspect, J.W.Lin further assumes that in Mandarin covert tenses are subject to the

restrictions with regard to which aspect they may select, which is given in (22) (from J.W.Lin 2003:264).²

- (22) a. Covert present tense must select imperfective AspP as its complement.
 b. Covert past tense must select perfective AspP as its complement.

Under the restrictions in (22) and the assumption by Bohnemeyer and Swift (2001), J.W.Lin holds that the interpretation of the temporal references in (20) - (21) can be made according to the aspectual information of the sentences. For example, (20a) *dǎpò yīge huāp ūg* 'break a vase' describes a telic event. Since the default aspectual viewpoint of telic descriptions is perfective, it is understandable that the temporal reference in (20a) is located in the past. The same analysis can be extended to (20b) - (20c). In (21a) - (21b), the predicates *cōngmíng* 'clever' and *xiāngxìn* 'believe' are atelic. According to the default aspectual point of view, an atelic description is imperfective, and under the aspect selection restrictions in (22a), which says that covert present tense must select imperfective AspP as its complement, the temporal reference in (21a) - (21b) hence can be interpreted as the present tense. Given that the value of the temporal reference can be determined under the aspect selection restrictions in (22), J.W.Lin claims that it is unnecessary to rely on the existence of a covert tense node in Mandarin.

However, careful consideration shows that J.W.Lin's proposal is not without problems. The most important reason is that without any context, a telic event can be understood as being presented in the perfective; it can also be understood as being presented in the imperfective. The tense of the sentence hence can be interpreted as past tense or present tense. See (23) - (24).

- (23) Zhāngsān shuā bái tā de xiézi.
 paint white 3SG SUB shoe
 'Zhangsan is paint his shoes white.'
 Or, 'Zhangsan painted his shoes white.'

² More on situation and viewpoint aspect in section 1.2.2 below. Here I just mention the general distinction between perfective and imperfective aspect in the sense of Smith (1997).

- (24) Zhāngsān shuō chū hěn duō mìnì
 speak out very much secrecy
 'Zhangsan is telling out many secrets.'
 'Zhangsan told out many secrets.'

(23) and (24) are two resultative constructions. Each sentence can have two temporal interpretations, present tense and past tense. These sentences show that aspect selection restrictions do not work here.

What is more, (20c) also raises some questions. In (20c), the verb phrase *chūshēng* 'be born' is telic, the sentence should be interpreted as the past tense according to (22b). However, we observe that the interpretation of the temporal reference cannot be made without an adverbial modifier, be it of place or of time. See (25a).

- (25) a. *tā chūshēng.
 3SG be.born
 INTENDED: 'He was born.'
 b. ?? tā 1990 nián chūshēng.
 1SG 1990 year be.born
 'He was born in 1990.'

In (25a), no adverbial is used and the sentence is ungrammatical. If J.W.Lin is right in the sense that perfective is default in a telic event, and the temporal interpretation is the past, the ungrammaticality of (25a) is unexpected. In fact, as (25b) shows, when we add a temporal adverbial, and the sentence is still not fully acceptable. According to our judgment (and that of other mainland speakers we consulted), the same two question marks should be added to (20c). The sentences get completely acceptable only after the addition of perfective marker *le*:

- (26) tā 1990 nián chūshēng .
 3SG 1990 year be.born
 'He was born in 1990.'

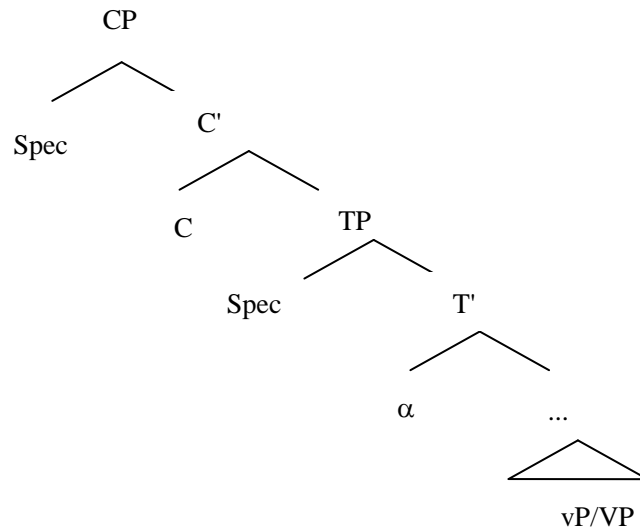
This shows that J.W.Lin's system does not work. The same can be said about (20a), which is much better with *le* as well, as is shown in (27).

- (27) tā dǎpò-le yī gè huāpíng.
 3SG break-PERF one CL flowervase
 'He broke a flower vase.'

To sum up, above, I have introduced different approaches to argue for the existence of TP in the structure of a sentence in Mandarin. Among them, Huang (1989) and Li (1990) start from the identification of finiteness. If we take finiteness to depend on tense, then we can make the argument that, since finiteness is a relevant notion in Mandarin, Mandarin has tense. Lin (2003) tackles the issue from the perspective of various effects that the temporal adverb *yǐqián* 'before' has on the interpretation of temporal references in the sentence. Lin argues that the different functions presented by *yǐqián* 'before' can be attributed to the interaction between *yǐqián* 'before' and an empty tense operator. Sybesma argues for a TP from the perspective of the interpretation of bare stative predicates, in which there are neither aspect markers, nor temporal adverbs, and the interpretation of which can only be manipulated using linguistic material (as opposed to non-linguistically expressed background knowledge). All the analyses show there must be some syntactic elements that interact with the temporal structure of the clause in Mandarin. I have also introduced J.W.Lin (2002, 2003), who argues against the existence of tense in Mandarin. I have shown that neither aspectual properties nor selectional restrictions can provide an account for the interpretation of temporal meaning in a sentence.

Based on the above introduction and the analyses we have presented, in the present thesis, we follow Sybesma (2003, 2004, and 2007), Huang (1982, 1998), Li (1990) and Lin (2003) among others, and assume that despite the absence of any overt markers, Mandarin has a tense node, a T, in the structure of the sentence. Specifically we assume that a Mandarin sentence has the following structure in (28).

(28)



There is a TP above vP/VP, the head of which is occupied by a pronominal variable α , which can be bound, or “set”, by aspectual particles, temporal adverbials or other elements in the C-domain. In (28), we can also see that in between TP and vP/VP there may be other projections as indicated by the dots, for instance, aspect, which we are going to introduce now.

Since there do not seem to be any differences in this respect between Mandarin and Chángshā, the variety of Chinese we discuss in this thesis, I will assume the same applies to Chángshā.

1.2.2 Aspect

It is widely assumed that there is a distinction between Viewpoint aspect (also called Grammatical aspect, Outer aspect) and Aktionsart (also called Situation aspect, Lexical aspect, Inner aspect).³ Viewpoint aspect refers to the way in which an event is presented (Smith 1997; Ramchand 2008; Travis 2010). It can

³ I will use the terms viewpoint and situation aspect when the semantics is concerned, while when it comes to syntax, I will use Outer and Inner aspect.

be presented as a completed whole, that is, viewed as if from the outside, or going on, that is, viewed as if from the inside (Comrie 1976). The former is called perfective aspect and the latter is called imperfective aspect. Languages differ in their types of viewpoint aspect, yet the contrasting semantics between perfective and imperfective is the most outstanding, all languages show such a contrast.

Viewpoint aspect is distinguished from situation aspect, the latter being an inherent feature of verbs or verb phrases and is determined by the nature of the situation that the verb describes. Such an event can have an endpoint (in which case it is telic), or it does not have an endpoint (in which case we call it atelic).

Both viewpoint aspect and situation aspect have a structural representation. The former is represented by a projection which is structurally placed on top of little *v*, while the projection associated with the latter is placed between *vP* and *VP*, as a result of which we refer to them as Outer aspect and Inner aspect respectively. For discussion and motivation, see Zagana (1993) and Stowell (1995) for Outer aspect and Travis (2010), MacDonald (2008), Borer (1998, 2005), van Hout (2000), Kratzer (2004), and Ritter and Rosen (1998) for Inner aspect. Below, I am going to introduce accounts for the layered structure of aspect in Mandarin that will be relevant in this dissertation.

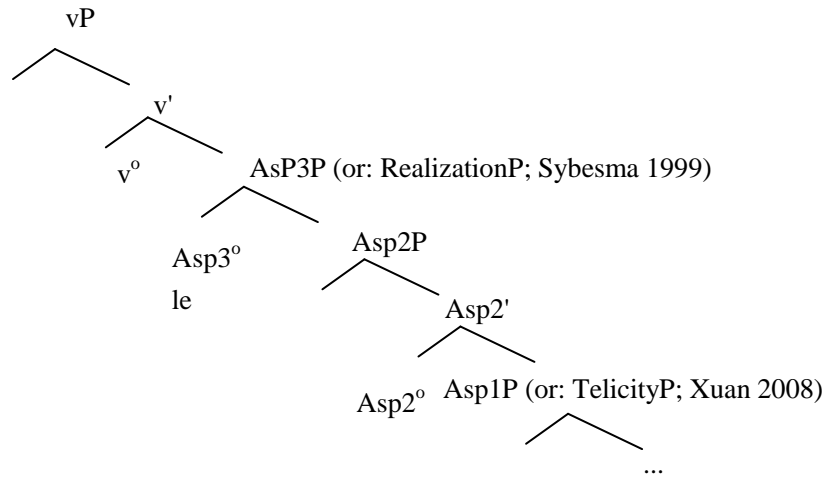
1.2.3 Viewpoint aspect in Mandarin

In this section, I introduce viewpoint aspect in Mandarin, based on what others have said about it. As with tense, I will take it that most conclusions will apply to Chángshā as well, unless indicated otherwise. In Mandarin, viewpoint aspect is marked by particles. Specifically, *le*, a suffix, is a perfective marker indicating that an event has been terminated or completed (Smith 1994). Specifically, in activities, *le* is used to indicate that an event has been terminated, while if it is an accomplishment event, it indicates the completion of the action. Preverbal element *zài* is a progressive marker, indicating that an event is ongoing, and *zhe*, a suffix, either indicates the resultative state or the ongoingness of an action. Suffix *guo* expresses experiential aspect, indicating that an event has taken place at least once before (e.g., see Chao 1968:251). The use of these particles is illustrated in (29).

- (29) a. tā chī-le yī wǎn fàn.
 3SG eat-PERF one CL meal
 'He ate one bowl of rice.'
- b. tā zài chī fàn.
 3SG PROG eat meal
 'He is eating the meal.'
- c. wǎmiàn xiàzhe yǔ.
 outside rain-DUR rain
 'It is raining outside.'
- d. wǒ jiàn-guo zhè ge rén.
 1SG meet-EXP this CL person
 'I have met this person once.'

In the literature, views differ with respect to the structural position of these particles. Some argue that *le*, *zài*, *zhe* and *guo*, as viewpoint aspect markers, uniformly appear in Outer aspect (i.e., higher than little *v*). Others, however, view them differently. For instance, Hu and Shi (2005) argue that the progressive marker *zài* is located higher than the other particles. Tsai (2008) also argues that *zài* and *guo* are higher than *le* and *zhe*; he only places the former in aspect positions above vP. Sybesma (2017) (as before, e.g., Sybesma 1999) claims that *le* is located in an Inner aspect position but interpreted in Outer aspect position. In fact, as we will see, according to Sybesma (2017), there are three Inner aspect positions in Mandarin, as illustrated in (30). Now I just focus on his ideas on the distribution and interpretation of the perfective marker *le*.

(30)



In (30), there are three Inner aspect projections between vP and VP, the perfective marker *le* is located in Asp3, Asp3P indicates whether the projected endpoint of a telic event is realized or not: When Asp3 is occupied by *le*, it is, otherwise, it is not. It is called a RealizationP (Sybesma 1997, 1999). Take (31), where we have an eating event, and a projected endpoint of the fish being finished: it is *le* that indicates that projected endpoint was in fact reached. In sentences without *le*, we may still have the endpoint, but it is not realized: *má-yǒu chī-guāng* /NEG-have eat-bare/ ‘haven’t eaten up’, *xiǎng chī-guāng* ‘want to eat up’. (For detailed analyses see Sybesma and Shen 2006, and Xuān 2008).

- (31) Tāmen chī-guāng-le yú
 3PL eat-bare-ASP fish
 'They finished the fish.'

What is important here is that, semantically, as a viewpoint aspect marker, perfective *le* should be in Outer aspect. However, in (30) it is in Inner aspect. Why is it there?

Sybesma provides two arguments for the idea that the perfective marker *le* is below little *v*. The first one is purely syntactic and builds on his analysis of the *ba*-construction in Mandarin (Sybesma 1999), in which *ba* is treated as an element which occupies little *v*^o (I will come back to the *ba*-construction in chapter 3). He claims that the little *v* in Mandarin must always be phonologically overt. This can be realized either by the movement of the verb or by inserting the element *ba*. So a transitive phrase is either [V-*v le*] (V has moved into *v*) or [*ba-v V le*] (*ba* has been inserted in *v*), as illustrated in (32). The point here is, if *ba* occupies *v*^o, then *le* cannot occupy a position in the Outer aspect domain: *ba* always precedes *le*, which in turn always follows V, as in (32b).

- (32) a. tā xǐ le yīfu.
 3SG wash PERF clothes
 'He has washed his clothes.'
 b. tā bǎ yīfu xǐ le.
 3SG BA clothes wash PERF
 'He has washed his clothes.'

Whatever is to the right of *ba* and not inside VP must be in the Inner aspect domain.

Sybesma's (2017) second argument is historical and is based on work by Xuan (2008). It is generally known that *le* started out as a full-fledged resultative element meaning 'complete', related to verb *liǎo* 'to finish', similar to verb *guāng* 'bare' in (31). And it gradually grammaticalized into an aspectual element expressing completion. Xuan (2008, 2011), following Roberts and Roussou (2003), points out that grammaticalization is associated with climbing upwards along the functional nodes in a syntactic structure, taking *le* as an example. In our structure, it started out in AsP1^o and over time climbed up the structure to end up in Asp3^o.

Having established that *le* is positioned lower than *vP*, the question left to explain is how it is possible that *le* occupies a position lower than *v*^o, i.e., in Inner aspect, and is at the same time interpreted as if it is in Outer aspect. In one way or another, a relation is established between these two positions to this

effect. Cheng and Sybesma (2004) and Cheng (2016) show that there are certain processes that are sensitive to the relation between these two aspect positions, one above and one below little *v*. There is also a different type of evidence. In Chénxī, one of the Xiāng dialects, there are two perfective markers: *tau*²⁴ and *lia*³³, *tau*²⁴ being a preverbal element and *lia*³³ a postverbal one, which we assume has the same distribution as Mandarin *le* (*lia*³³ seems to be the cognate of *le*; it may have been borrowed from Mandarin). What is interesting is that *tau*²⁴ and *lia*³³ can co-occur:

- (33) a. t^ha³³ tau²⁴ ɕi⁴¹ i³³fu²⁴.
 3SG PERF wash clothes
 'He has washed his clothes.'
 b. t^ha³³ ɕi⁴¹ lia³³ i³³fu²⁴.
 3SG wash PERF clothes
 'He has washed his clothes.'
 c. t^ha³³ tau²⁴ ɕi²¹ lia³³ i³³fu²⁴.
 3SG PERF wash PERF clothes
 'He has washed his clothes.'

In (33a), with *tau*²⁴, the sentence means that he has washed his clothes: the washing event has been completed. In (33b), *lia*³³ follows the verb, *tau*²⁴ is not used. The sentence means the same as (33a). In (33c), both *tau*²⁴ and *lia*³³ are used with the same meaning as in (33a) and (33b). Even though (33c) is a grammatical sentence, my informants tell me that sentences with preverbal *tau*²⁴ are to be preferred. Older people prefer *tau*²⁴ instead of *lia*³³. Only young people (or immigrants) will use verb final *lia*³³, most likely under the influence of Mandarin. In any case, what these examples show is that *lia*³³, like *le*, (presumably) occupies an Inner aspect position, while expressing the Outer aspect meaning of perfectivity, and that, in doing so, it is optionally doubled by preverbal element, *tau*²⁴, which may very well be located in the head of Outer aspect. This confirms the idea that there can be a relationship between these two positions. We will use this finding in chapter 2.

In what follows I continue to use Sybesma (2017), in which Inner aspect in Mandarin is a three-layered structure. This idea of a three-layered Inner

aspect is important for me, since it helps me to provide an analysis to account for the distribution of the different aspect particles in Chángshā. In fact, our analysis of the Chángshā data provides strong evidence for this three layered structure, much stronger than the Mandarin evidence that Sybesma uses. But first we look at other aspects of situation aspect.

1.2.4 Situation aspect: semantics and syntax

Situation aspect concerns the temporal construction of a verb. The earliest investigation of verb meanings can be traced back to Aristotle some 2000 years ago, whose ideas were further developed by Skyle (1963) and Vendler (1967). Vendler classified verbs into four types based on the properties of dynamicity, duration and telicity. The classification of verbs is illustrated in (34).

(34)

- (i) States: not dynamic, not telic (*know, love, belong to*, etc.)
- (ii) Activities: dynamic, not telic (*run, sing, swim, walk*, etc.)
- (iii) Accomplishments: dynamic, telic (*build, bake, eat*, etc.)
- (iv) Achievements: not dynamic, telic (*die, win, discover, arrive*, etc.)

Note that researchers differ much in viewing the classification of verbs. For example, Smith argues that apart from the above four types of predicates there is another type of predicate: semelfactive predicates (e.g. *cough, knock*). We just neglect the relevant discussion and take the four classes of verbs as the general division of verbs.

Telicity refers to whether or not the eventuality a predicate refers to involves a natural end-point. A predicate referring to an eventuality with such an endpoint is telic, and a predicate that refers to an eventuality that is not atelic. The widely accepted test for telicity is the use of temporal for-phrases and in-phrases. An event compatible with for-phrase is atelic and an event compatible with in-phrase is telic. For instance, (35a) is telic, the event comes to its end when the agent finishes the apple, it is compatible with an in-phrase but not with a for-phrase. (35b) is atelic; there is no endpoint for the event. We

do not know from the sentence when the action comes to its end. It is compatible with a *for*-phrase but not with an *in*-phrase.

- (35) a. John ate an apple **for* a few minutes/*in* a few minutes.
 b. John ran *for* a few minutes/**in* a few minutes.

This view of distinguishing one verb from another is mainly based on the properties of the verb. However, it is quickly found out that, not only verbal meanings, but properties of verbal arguments and other NPs indicating the goal or result of an action also influence the telicity properties of an event (Verkuyl 1972; Krifka 1989; Travis 1994; Tenny 2000; Borer 2005 among others). For example, in (36), where the verbs are the same in both sentences, a numeral object will lead to a telic event (36a), while a plural noun object will lead to an atelic event (36b). In (37a), the location argument leads to an atelic reading, while in (37b), the goal argument yields a telic reading.

- (36) a. John built a house **for* months/*in* a month.
 b. John built houses *for* months/**in* a month.
- (37) a. He pushed the cart in the park *for* hours.
 b. He pushed the cart to the park *in* five minutes.

Sentences in (36) - (37) show that the meaning of a verb is not the only factor. The direct object or prepositional phrase can also affect the telicity of an event.

As mentioned above, following Krifka (1992, 1998), Borer (2005b) and Travis (2010) among others, I assume in the present thesis that a telic event is an event that contains an end point. A predicate which of itself is not telic, like an activity, can be compositionally made telic, thus forming an accomplishment, when an end point is added, in the form of an object with a specified quantity, a phrase which indicates the path before the event ends (a path argument), or other phrases which can be used to measure the temporal structure of the event. Achievement verbs are inherently telic.

Telicity is not only an important semantic property of predicates, it plays a great role in syntax too, in the sense that telicity is represented structurally

(Tenny 1987, 1994; Borer 1994, 2005; Travis 1991, 2000, 2010; Ritter and Rosen 2001, 2002). As is clear from the previous section, following the researchers just mentioned, and especially Travis (2010) and Sybesma (2017), I assume the existence of aspectual projections between vP and VP, which constitute the structural representation of situation aspect, especially telicity. In what follows, we will first introduce the semantic properties of telicity in Mandarin and then I introduce the analyses in the literature arguing for the existence of Inner aspect projections encoding telicity in that language. My starting point is Sybesma (2017).

1.2.5 Inner aspect in Mandarin

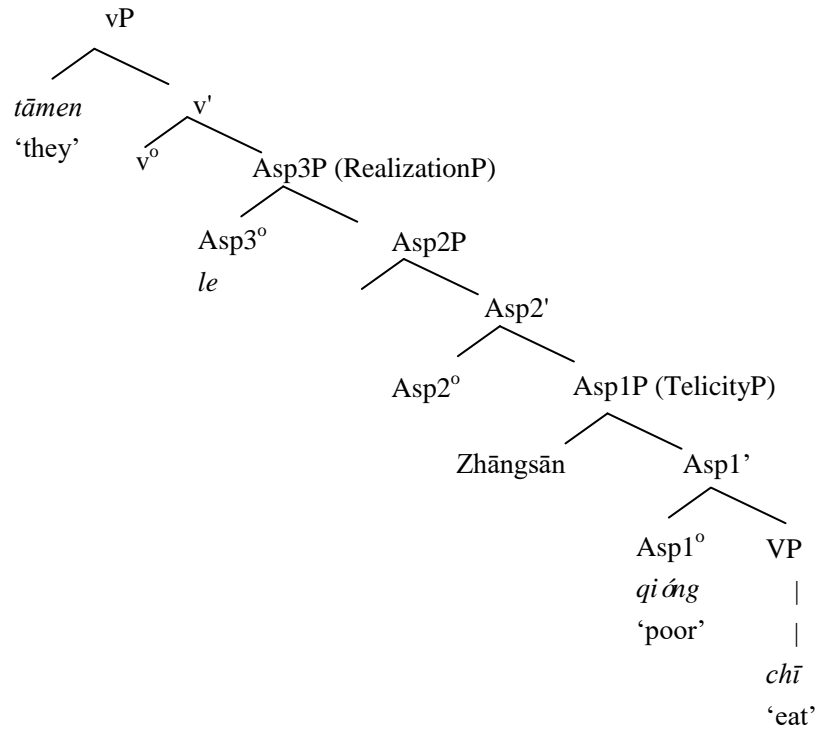
In this section, I introduce two analyses which argue for the existence of syntactic or compositional telicity in Mandarin from different perspectives: Sybesma (1999, 2011, 2017), who starts out from resultative constructions; So and Kuo (2005), who focus on properties of object noun phrases. These two analyses share the idea that telicity in Mandarin is syntactically encoded. But with regard to the structure of inner aspect, these three analyses vary. In Sybesma (1999, 2011, 2017), telicity is split into layers; while in So and Kuo (2005), telicity in Mandarin is like in many other analyses, a single projection.

In what follows, I start with Sybesma (2017), which holds that Inner aspect in Mandarin is a three-layered structure: bottom-up Asp1P, Asp2P and Asp3P between vP and VP. I have introduced Sybesma's analysis of Asp3P in section 3, in which Asp3P was identified as RealizationP, indicating whether the endpoint projected elsewhere (Asp1, as we will see) is realized or not.

Asp1P (or TelicityP; Xuan 2008) has the function of closing off the open end of the event or action denoted by the VP. It is occupied by fully lexical predicative elements, which assign a thematic role to a constituent in their spec. Asp2P lies in between TelicityP and Realization. If occupied, it indicates that the process, which is denoted by the VP and which is closed off by the endpoint denoting element in the head of Asp1P (or TelicityP), is no longer accessible for syntactic operations (Sybesma 2017). Another way of looking at it is that it makes the endpoint absolute and definitive. I will explain what is meant by this.

The Asp1P in Sybesma (2017) can be traced back to his analysis of VP construction in Mandarin in 1992, 1997 and 1999, when, based on Teun Hoekstra's work (1980s, 1990s), Sybesma developed a small clause (SC) analysis to deal with Mandarin verb-result phrases and *ba*-sentences (Sybesma 1999). In the SC analysis, resultatives are analyzed as follows: there is a V, which is atelic (it is an activity) and it has a complement which is constituted by bare subject-predicate combination, the small clause, which denotes the endpoint of the activity. The key idea of the SC analysis is that the verb in a resultative construction has an open end, and the process is closed off by a resultative denoting small clause. This idea is compatible with that of Tai and Chou (1975) and Tai (1984), where it is pointed out that, with a few exceptions, telic predicates in Mandarin consist of a verb denoting the action and a separate element denoting the result. Xuan (2008), following work by Travis and others, proposed to move the result denoting small clause into the functional domain right above VP, subsequently calling it TelicityP. Here is (31) again written in (38), with some small adaptations, to illustrate the analysis of a sentence like (39). It is important to emphasize once more that the head of Asp1P is a lexical predicative element which has a thematic relation with the nominal constituent in its spec.

(38)



- (39) tāmen chī qí'ǒng le Zhāngsān.
 3PL eat poor PERF Zhangsan
 'They ate Zhangsan poor.'
 (e.g. a big group of his friends ate so much that it resulted in
 Zhangsan becoming poor)

Asp1P, made up by *Zhāngsān qí'ǒng* 'Zhāngsān poor', provides the endpoint to the open ended activity denoted by the VP, here headed by *chī* 'eat', and Asp3P expresses whether the endpoint was reached or not (if its head is occupied by *le*, as it is in (38-39), it is, if not it isn't).

Sybesma (2017) introduces a third AspP, Asp2P, in between Asp1P (TelicityP) and Asp3P (RealizationP). The motivation of Asp2P is based on sentences like (40) (from Sybesma 2017, who adapted them from Xuan 2008).

- (40) a. Wǒ zǎo jù bǎ kè tīng cā wán le.
 1SG early then BA living room sweep finish PERF
 'I finished cleaning the living room a long time ago.'
- b. Nǐ bǎ mǎn suǒ-hǎo-le mǎ-yǒu?
 2SG BA door lock-good-LE not-have?
 'Did you lock the door?'
- c. Wǒ yìhí mǎ kàn-chéng nǎ-bù diànyǐng.
 1SG all.along NEG look-success that-CL film
 'I never succeeded in seeing that movie.'

In (40), we cannot interpret the sentences such that, for instance for (40a), *wán* 'finished' predicates of the *kètīng* 'living room' or that, in (40b), *hǎo* 'good, done' predicates of *mǎn* 'door': these sentences do not express that the living room is finished as the result of a cleaning event or that the door is done as the result of a locking event. Rather, the elements *wán* 'finished', *hǎo* 'good, done' and *chéng* 'succeeded' scope over the event as a whole: the event of cleaning the living room, etc. In Chinese linguistics, these elements are known as "phase complements" (Chao 1986), not to be confused with the term "phase" in minimalism. Since they do not predicate of the object, these elements do not occupy Asp1⁰, and since they co-occur with *le*, they obviously also do not occupy Asp2⁰. That is why Sybesma proposes a third position.

Sybesma tries to connect this tree to differences between accomplishments and achievements, suggesting that the difference may be a structural one. Although both telic, achievements and accomplishments are different in the sense that accomplishments involve durativity, dynamicity, or agentivity, while achievements are (near) instantaneous changes from $\neg\phi$ to ϕ (Rothstein 2004:155; as quoted in Sybesma (2017)). As a result, accomplishments are compatible with the progressive, while achievements are not. As (41) shows, the accomplishment expression *write a letter* is compatible with the progressive, while this is not the case for the achievement verb *find*.

- (41) a. Mary was writing a letter.
 b. *Mary was finding her key.

With a reference to Tai (1984), and Tai and Chou (1975), Sybesma (2017) notes that the Mandarin counterpart of achievement verbs often consist of a process and an endpoint, just like accomplishments. Examples include *kàn-jìàn* 'look-perceive < see' and *zhǎo-dào* 'search-success < find'. The difference between achievements and accomplishments lies in the nature of the element that expresses the endpoint: with accomplishments, the endpoint is a lexical element and it does not block the process preceding it from being syntactically accessible (hence, the possibility of forming a progressive; see (41a,b)), while the endpoint denoting element in achievements is expressed by the type of elements that we called “phase complements” earlier on, and they do block the process expressed by the verb preceding it, with the result that forming a progressive is not possible, as shown by (42) (all examples from Sybesma; % in (42b) shows variation among native speakers consulted).

- (42) a. Tā (zhèng)zǎi cā gān bōlí.
 3SG right be.at wipe dry glass
 'He is wiping the glass dry.'
- b. Nǐ zǎi gān shénme?! %Nǐ zǎi nòng huǐ wǒ
 2SG be.at do what 2SG be.at do broken 1SG
 de diànnǎo!
 SUB computer
 'What are you doing?! You are destroying my computer!'
- (43) a. *Wǒ zhèng-zǎi kàn chéng nǎ bù diànyǐng.
 1SG right-be.atlook success that CL film
- b. *Wǒ zhèng-zǎi zhǎo dǎo wǒ de yàoshi
 1SG right-be.atfind out 1SG SUB key

After some discussion, Sybesma concludes that the difference between (42) and (43) is related to the position the endpoint denoting elements occupy: elements in Asp1⁰ do not block syntactic operations targeting the V, whereas elements in Asp2⁰ do, thus giving a structural account of the difference between accomplishments and achievements. His argument is strengthened by facts like the following, in which both positions are filled:

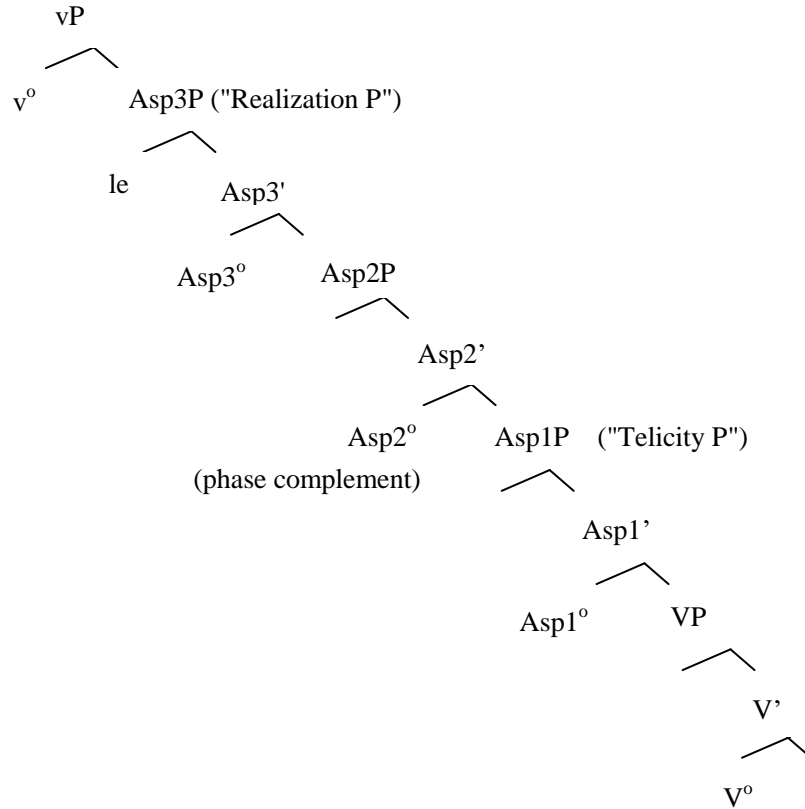
- (44) a. Tā bǎ diànnǎo nòng sǐ diào le!
 3SG BA computer do dead off PERF
 'He completely destroyed the computer!'
- b. Wǒ bǎ yìndòngxié pǎo huāi diào le.
 1SGBA sneakers run to.pieces off PERF
 'I ran my sneakers completely to pieces.'

Note that the progressive is not compatible with them (44a), while it was in (42b); this is shown in (45).

- (45) *Nǐ zài nòng huāi diào wǒ de diànnǎo!
 2SG be.at do broken off 1SG SUB computer

Here is the tree once more, as proposed by Sybesma (2017), even though it is based on Travis (2010) Xuan (2008, 2011).

(46)



The head of Asp1P is where the lexical endpoint is positioned (like *sǐ* 'dead' in (44a) and *huà* 'broken' in (44b)) and the head Asp2P is filled by the elements called phase complement (like *dìào* 'off' in these examples), while the head of Asp3P is occupied by perfective marker *le*.

In the following chapter, I assume Sybesma's (2017) analysis, modifying it in at least one place in that I will argue that Asp2° may be occupied by different types of elements (not just these "phase complements") and that its function varies accordingly.

Above, I focused on Sybesma's (2017) view of Inner aspect in Mandarin. Aside from concretely proposing the three-layered structure in between vP and VP, it also is one way in which researchers have shown that situation aspect is compositional in Mandarin. Other researchers have proposed similar views,

leading to similar structures. In the next section, I review Soh and Kuo (2005), who look at the relation between telicity and properties of object noun phrases.

1.2.6 Telicity in Mandarin

Whether there are telic verbs in Mandarin has aroused a hot discussion in the literature. Tai (1984) holds that there are no simplex accomplishment verbs in Chinese. In many cases, telicity is only implied. The expression of telicity arises with the addition of a resultative complement, as we saw above, or a bounded object, and in the latter case, the telicity is only implied, or so it seems, when we consider examples such as those in (47a), where an accomplishment predicate sentence is followed by a sentence denying the implied result of the first.

- (47) a. tā xiě le yī fēng xìn, kěshi méi xiě wán.
 3SG write PERF one CL letter, but NEG write finish
 'He wrote a letter, but he did not finish it.'
- b. # He wrote a letter, but he did not finish it.

The first part of (47a) describes an accomplishment situation, presented in the perfective, and yet, the sentence is compatible with a follow-up sentence that negates the completion of the action in the first sentence. This is different from English. In English, an accomplishment situation presented in the past or perfective followed by an assertion that the event has not been completed causes a contradiction (see (47b)).

However, Soh and Kuo (2005) point out that telicity is not always only implied. It depends on a number of factors, such as the type of verb and the type of object. They suggest that the absence of a contradiction in (47a) has to do with the nature of the object in a creation event like writing a letter. They divide events into two classes: those that Allow Partial Object (APO) and those that allow No Partial Object (NPO). In NPO situations we have a created object which cannot be considered the relevant object until the process of creation has reached its inherent endpoint. For example, *yī-jīān fángzi* 'a/one house' cannot be properly called 'a house' in a building event until the building of the house is

finished. In APO contexts, on the other hand, the object *can* be considered the relevant object before the inherent endpoint of the event is reached. For example, if a drawing event (*hu à yī fù hu à* 'draw a picture') is stopped before reaching its inherent endpoint, the object created can still be called "a picture".

Based on the distinction between NPO and APO, Kuo and Soh claim that the compatibility of the negating follow-up sentence in (47a) can be attributed to the properties of the object, *yī-fēng-x* 'a letter', which, according to them, is an instance of an APO: even an unfinished letter is still a letter.

As Soh and Kuo point out, we see a similar phenomenon with other than verbs of creation in the sense that the nature (esp. divisability) of the object is of utmost important in creating genuinely telic events. Consider the contrast between (48a) and (48b), where completion is necessary with a numeral object but not with a demonstrative object.

- (48) a. tā chī le nà gè dàngāo, kěshì mǎ chī wán.
 3SG eat PERF that CL cake but NEG eat finish
 'He ate two cakes /that cakes', but he did not finish them /it.'
- b. *tā chī le liǎng gè dàngāo, kěshì mǎ chī
 3SG eat PERF two CL cake but not eat
 finish
 wán.
 'He ate two cakes, but he did not finish them /it.'

In (48a), the object is a definite noun phrase; the sentence is compatible with a negating follow-up sentence, while this is not possible if the object is a quantized noun phrase (48b). Soh and Kuo point out that this is related to the feature specification of nominal phrases. Following Jackendoff (1991), Soh and Kuo assume that nominal arguments may bear the features \pm b[ounded] and \pm i[nternal] structure. The feature $+$ b refers to the boundedness of an entity. The feature $+$ i indicates whether the entity has inherent division into discrete members (Soh and Kuo 2005). The feature specification for English nouns is presented in (49) from (Jackendoff 1991:20).

(49) English

Bare mass nouns	[-b,-i]	substances	(<i>custard, water</i>)
Bare plurals	[-b,+i]	aggregates	(<i>sandwiches, buses</i>)
Singular count noun	[+b, -i]	individuals	(<i>the sandwich, a bus</i>)
Numeral plurals	[+b, +i]	aggregates	(<i>3 sandwiches, 4 buses</i>)

However, different from Jackendoff (1991), Soh and Kuo suggest that the features are encoded in the nominal head and nominal projection in a bottom-up manner under a feature percolation rule. See (50) from Soh and Kuo (2004:206, 207).

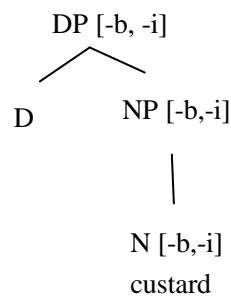
(50) Numeral	[-b]→[+b]
Definite determiner or demonstrative	[-b] →[±b]
Classifier	[-i] →[±i]

In (50), a numeral changes the [-b] feature of its selected constituent to [+b]. A definite determiner or demonstrative changes the feature [-b] of its selected constituent to [±b]. The classifier changes the [-i] feature of its selected constituent to [±i].

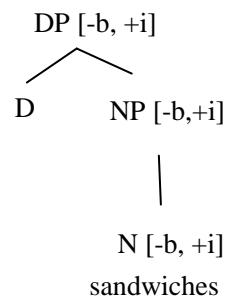
Under the rule in (50), the feature specification for English noun phrases is presented in (51) (from Soh and Kuo (2005:206, 207).

(51)

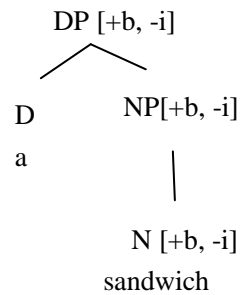
a. Bare mass nouns [-b, -i]



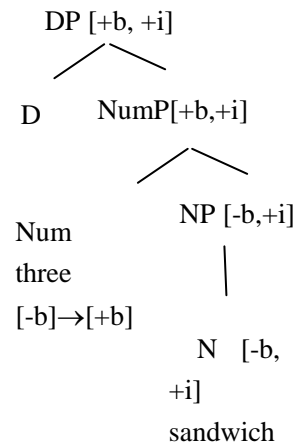
b. Definite plurals [-b, +i]



c. Singular count nouns [+b, -i]

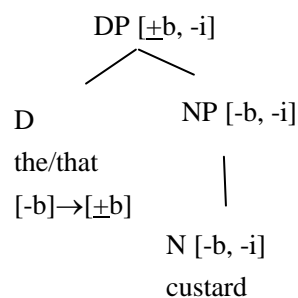
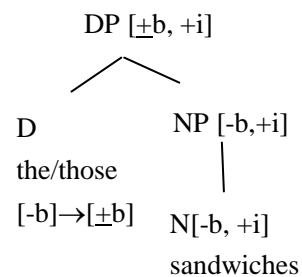


d. Numeral plurals [+b, +i]

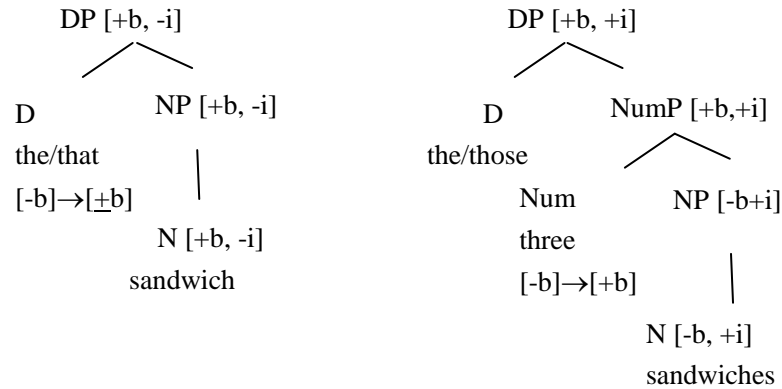


(51) shows the bottom-up feature percolation caused by the numeral. The same feature percolation process can be extended to DP, where the definite determiner and the demonstrative change the boundedness feature of the constituent they select from [-b] to [+b] (cf. Jackendoff 1996). See (52) (from Soh and Kuo 2005:206).

(52)

a. Definite mass nouns [\pm b, -i]b. Definite plurals [\pm b, +i]

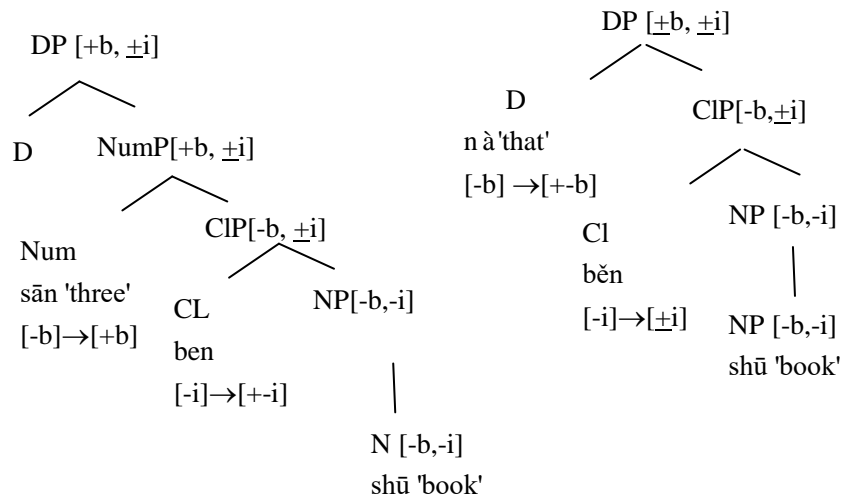
c. Definite singular count nouns [+b, -i] b. Definite numeral plurals [+b, +i]



However, Mandarin is different from English, in the sense that Mandarin head nouns do not differentiate between mass from count as is pointed out in Chierchia (1998): Mandarin head nouns are mass (but see Chang and Sybesma 1999 for counterarguments to this claim). They are specified as [-b, -i]. Based on the rules given in (50), the feature percolation of nominal phrases in Mandarin is presented in (53) (from Soh & Kuo 2005:212).

(53)

- a. Numeral expressions [+b, +i] b. Demonstrative noun phrase[+b, +i]



(53) shows that in Mandarin a DP with an object containing a numeral ends with [+b] feature, and a DP with an object containing a demonstrative ends with [±b] through the process of bottom-up feature percolation. The feature percolation in the DP projection explains why a perfective accomplishment with a numeral object is not compatible with the negation with the entailed result, while it can if the object contains a demonstrative phrase.

The importance of all this for this thesis is that, in this thesis, based on the analysis of feature percolation in nominal phrase in Soh & Kuo (2005), I assume that in Mandarin only accomplishment verbs with an object containing a numeral compose a genuinely telic event, while if the object contains a demonstrative phrase it may express a telic or an atelic event.

1.2.7 Summary of Chapter 1

This chapter presents an introduction to the language we will investigate (the Chángshā variety of Xiāng) and to some theoretical tools that I will use in my analysis. I have introduced the properties of tense and aspect (Outer aspect and

Inner aspect) in Mandarin. I concluded that Mandarin has a TP and that the perfective marker *le* is located in an Inner aspect position but interpreted in an Outer aspect position. Furthermore, Inner aspect in Mandarin is a three-layered structure.

The main purpose of this thesis is to investigate the morpho-syntax of aspect in Xiāng, to find out what the properties of the aspect system in Xiāng are in the perspective of general linguistics. I assume that in the relevant respects, Xiāng is like Mandarin: it has a TP and a three-layered Inner aspect. This framework, will enable me to present a novel approach to the use of the elements *ta*²¹ and *ka*⁴¹ in the Chángshā dialect.

1.3 Overview of the thesis

This thesis aims at investigating the morpho-syntax of aspect in Xiāng, more in particular the variety spoken in Chángshā. The purpose is twofold: language specific as well as more generally theoretical. On the one hand, I will provide an analysis of the expression of aspect in Xiāng, while on the other hand I point out that the cases we are dealing with are not isolated from linguistics in general.

The main motivation comes from two observations. First, I observe that there are cases in which one aspect particle is applied to express more than one aspectual meaning. For instance, I observe that in Chángshā, one of the Xiāng varieties, in some cases, the particle *ta*²¹ can be used to express a perfective meaning, but in some other cases, it can also be used to express a progressive/durative meaning. It is not clear how people distinguish the perfective meaning from the progressive/durative meaning since they are expressed by the same particle. Secondly, there is the particle *ka*⁴¹, which has been analysed as a perfective marker as well but I think that this is mistaken: first, in many contexts it cannot be a perfective marker and aside from that, it can co-occur with *ta*²¹.

These observations lead to the following research questions:

- a) What is the interpretation and distribution of *ta*²¹?

- b) How can we account for the observation that in Xiāng, or in any case in the Chángshā variety of it, the same particle can be involved in the expression of different aspectual meanings?
- c) What is the interpretation and distribution of ka^{41} ?

Within the Inner aspectual framework presented above, I point out that there are two particles sharing the same morphological form: one is used as a perfective marker, ta^{21}_{PERF} ; the other is used as a progressive marker, ta^{21}_{PROG} . The difference between the two particles lies in the different syntactic positions they occupy. ta^{21}_{PERF} indicating whether an event is realized or not, is structurally higher than ta^{21}_{PROG} , indicating that the action presented is ongoing and continuous. Both ta^{21}_{PERF} and ta^{21}_{PROG} are located in Inner aspect positions, lower than little *v* and higher than *V*.

Aside from arguing that ta^{21}_{PROG} is a progressive marker occupying one of the inner aspect positions, I point out that there is another progressive marker, in Outer aspect position. That is, we have two progressive markers in Xiāng. One is ta^{21}_{PROG} , the other is the preverbal $tsai^{21}ko^{24}$. What differentiates ta^{21}_{PROG} from $tsai^{21}ko^{24}$ is that the latter is located in Outer aspect, while ta^{21}_{PROG} is in Inner aspect position. As we will explain, $tsai^{21}ko^{24}$ focuses on the meaning of ongoingness, while ta^{21}_{PROG} focuses on the meaning of both ongoingness and continuation. Another difference is that, unlike $tsai^{21}ko^{24}$, ta^{21}_{PROG} must always be accompanied by other material. Using the framework introduced above as well insights from Tsai (2008) on tense anchoring, I will explain why this is the case.

As noted before, ka^{41} was treated as a perfective marker in the previous literature. In the present thesis however, it is argued that ka^{41} should not be treated as perfective marker. The main reason is that its distribution is much more restricted: it only appears in telic events, to give one example. Instead of treating ka^{41} as a perfective marker, I explore the possibility of locating it in the position labeled as $\text{Asp}2^0$ in the tree structure introduced above (the “phase complement” position). I argue that it indicates that the process expressed by *V* that precedes the endpoint denoted by the result denoting element in $\text{Asp}1^0$ is not accessible for further syntactic operations. For instance, it is not possible for the event to be

presented in the progressive. ka^{41} occupies the same position as ta^{21}_{PROG} , mentioned above. These two markers never co-occur.

As we will see towards the end, in Chángshā and Xiāng in general, all three Inner aspect positions can be lexically realized. ta^{21}_{PERF} occupies Asp3^o; ka^{41} and ta^{21}_{PROG} occupies Asp2^o, and a lexical result predicate may be located in Asp1^o position.

As indicated above, the significance of this thesis is meant to lie in the description and analysis of aspect in Xiāng, but also more generally in that it will support analyses in which Inner aspect plays a role. Furthermore, the thesis underscores the claim that Chinese languages are not all the same. Although the basic analysis is the same, the way the different positions in the structure are realized is different. For instance, although Mandarin has “phase complement” it does not have an element like Xiāng ka^{41} . Also, whereas this language has one element that can express both perfective and progressive/durative aspect, ta^{21} , Mandarin uses two different elements for these purposes, *le* and *zhe* respectively.

1.4 Summary of the following chapters

Following this introductory chapter, there are altogether 4 more chapters in this thesis.

In chapter 2, I provide an analysis to account for the interpretation and distribution of the postverbal aspect particle ta^{21} . It is multi-functional. The interpretation of ta^{21} varies according to context. It can be a perfective marker, ta^{21}_{PERF} , indicating that an action has been completed. It can also be a progressive marker ta^{21}_{PROG} , indicating that an action is in ongoing and continuous. The central question in this chapter is how it is possible that one element can express two such different aspectual notions. I provide an analysis to distinguish the contexts for the different interpretations of ta^{21} . I point out that we have two different ta^{21} s, labeled ta^{21}_{PERF} and ta^{21}_{PROG} , which share the same morphological form. I argue that both are located in the Inner aspect domain, however, ta^{21}_{PROG} is structurally lower than ta^{21}_{PERF} . An interesting difference between ta^{21}_{PERF} and ta^{21}_{PROG} is that the latter, unlike the former, must always be accompanied by other material, such as a preverbal progressive

marker *tsai*²¹*ko*²⁴ or an element of the same form in sentence-final position. I explain this by adopting Tsai's (2008) ideas on Tense anchoring. Tsai assumes that for a sentence to be grammatical Tense has to be supported one way or another. One way in which this can be done is by moving aspectual element into the T-position. I argue that, because it is too deeply embedded in Inner aspect, *ta*²¹_{PROG} is unable to move up to combine with T to anchor the sentence to tense, while *ta*²¹_{PERF} is high enough to do so. Since it cannot do it itself, *ta*²¹_{PROG} needs other elements to do the job.

In chapter 3 I provide an analysis of the distribution and interpretation of the use of *ka*⁴¹. The central questions in this chapter are:

- a) What is the semantic interpretation and syntactic distribution of *ka*⁴¹?
- b) How can we explain the use of *ka*⁴¹? Is it just an idiosyncratic property of Xiāng or an instantiation of certain properties in general sense?

I show that the general idea in the literature that *ka*⁴¹ is a perfective marker is not correct. After discussing several options, I conclude *ka*⁴¹ is an element that is located in the position labeled as Asp2⁰ in the tree structure introduced above (the “phase complement” position). I argue that it indicates that the process expressed by V that precedes the endpoint denoted by the result denoting element in Asp1⁰ is not accessible for syntactic operations. For instance, it is not possible for the event to be presented in the progressive. It provides a definitive end to the event.

In Chapter 4, I provide three analyses that are used to further support the proposed analysis of *ta*²¹ in chapter 2. The first analysis is built on data from Xùpǔ, another Xiāng variety. The second one is based on the distinction between *zhe*_{PERF} and *zhe*_{PROG} in Mandarin. In the third analysis, I show that historically *zhe* has been evolved from a perfective marker to an imperfective marker. *ta*²¹ is the cognate of *zhe*. In this sense, the use of *ta*²¹_{PERF} and *ta*²¹_{PROG} can be seen as similar to that of the two *zhes*.

Chapter 5 presents the conclusion. In this chapter, I summarize the main assumptions and analyses of each chapter. I also point out the relevance of the present research to analyses of aspect in Mandarin syntactic theory more generally and I present some questions for further research.

Chapter 2. V + *ta*²¹

2.1 Introduction

An event can be presented as a whole, including the beginning and endpoint; it can also be presented with its inner stages. These two ways of presenting events are known as perfective and imperfective respectively. In Mandarin, these two ways are indicated by aspect particles. We have mentioned in chapter 1, that perfective is presented by the particle *le*. Imperfective is presented by preverbal *zài* or postverbal *zhe*. *zài* is a progressive marker indicating that an action is ongoing, and *zhe* is what is often called a durative marker indicating that a result state stays, but it can at other times also indicate that an action is in progress. There are cases in which the differences between *zài* and *zhe* are not so clear-cut, e.g., when both are used to indicate the continuity of an action. We will see later on that Tsai (2008) assigns different structural positions *zài* and *zhe*. In chapter 4, I will return to this particular point, but since the differentiation between them is not my concern in this chapter, I just use the term “imperfective” to refer to both *zài* and *zhe*. The expression of perfective and imperfective in Mandarin can be seen in (1b, 1c) and (1d, 1e) respectively.

- (1) a. tā nǎ zhe/le yī běn shū zài shǒu lǐ.
 3SG take IMP/PERF one CL book LOC hand in
 with *zhe*: 'He was holding a book in his hand.'
 with *le*: 'He took a book in his hand.'
- b. tā mǎi le yī běn shū.
 3SGbought PERFone CL book
 'He bought a book.'
- c. tā kàn le yī běn shū.
 3SG read PERF one CL book
 'He read a book.'
- d. tā zài kàn yī běn shū.
 3SG IMP read one CL book
 'He is reading a book.'

- e. tā kàn zhe wǒ bù shuō huà.
 3SG look IMP 1SG NEG speak words
 'Looking at me, he did not speak.'

zhe and *le* are both aspectual particles, with contrasting meanings. The two particles are acceptable in (1a). When *le* is used, the action is presented as having been completed, if *zhe* is used, the result state is presented as staying on (Li &Thompson 1981); in (1b) - (1c), *le* indicates that the action has been terminated/completed; in (1d), *zài* is used and the action is presented as ongoing. In (1e), *zhe* is used to indicate the continuation of an action, while at the same time another action takes place. Given the use of aspectual particles and their interpretations, we might conclude that different aspects are associated with different particles.

In this chapter, however, we see that in Chángshā, both the perfective and imperfective aspect are expressed by the same marker, *ta*²¹. This is illustrated in (2) - (4).

- (2) a. li⁴¹ k^han⁴⁵ la⁴¹ pən⁴¹ xy³³ pu²⁴?
 2SG read that CL book QM
 'Will you read that book?'
 b. li⁴¹ k^han⁴⁵ ta²¹ la⁴¹ pən⁴¹ xy³³ mau²¹?
 2SG read TA that CL book QM
 'Have you read (in) that book?'

The minimal pair in (2) shows that *ta*²¹ is a perfective marker: aside from the negative question particle at the end (which differs according to the aspectual properties of the predicate; see Cheng, Huang and Tang 1996). Formally, the only difference between these two sentences is the presence vs. absence of *ta*²¹ which correlates with the difference in meaning: the perfectivity in (2b) which is missing in (2a). There can be little doubt that *ta*²¹ is a perfective marker.

However, when we look at the sentences in (3), there can be equally little doubt that *ta*²¹ is an imperfective (more particularly, a progressive) marker:

- (3) a. $t^h a^{33}$ mau^{21} $k^h an^{45}$ la^{41} $pən^{41}$ xy^{33} .
 3SG NEG read that CL book
 ‘He has not read that book.’
- b. $t^h a^{33}$ mau^{21} $k^h an^{45}$ ta^{21} la^{41} $pən^{41}$ xy^{33} .
 3SG NEG read TA that CL book
 ‘He is not reading that book.’

We will consider the details later on in this chapter, but if we look at the elements in (3b), the progressive reading must come from ta^{21} . That ta^{21} can express both perfective and progressive is confirmed by (4), which is ambiguous. The only element that can be source of the ambiguity is ta^{21} .

- (4) $t^h a^{33}$ $zən^{41}$ $zəz^{41}$ $tsən^{33}$ $tsən^{33}$ ti $k^h an^{45}$ ta^{21} la^{41} $pən^{41}$ xy^{33} .
 3SG attentively read TA that CL book
 ‘He read that book attentively (not necessary finished).’
 ‘He is reading that book attentively.’

Given this observation, we are naturally led to ask:

- a) How can these two contrastive meanings be expressed by one single form ta^{21} ?
- b) In which context is ta^{21} used as a perfective marker and in which contexts is it used as an imperfective marker?

Note that in the present thesis, since one of my major tasks is to investigate the use of ta^{21} as a perfective marker on the one hand, and an imperfective marker on the other hand, in asking the above questions, I neglect temporarily the distinction between progressive and durative. As I have mentioned in the start of this chapter, I just use the term "imperfective" to refer to both (even though at some point I will distinguish between them). The same goes for termination and completion, which will be subsumed under the cover term "perfective".

Different from analyses in the literature (which will be reviewed below), I argue for the idea that there are two ta^{21} s sharing the same morphological form. I call them ta^{21}_{PERF} and ta^{21}_{PROG} . I will argue that one of the properties that

distinguishes ta^{21}_{PERF} from ta^{21}_{PROG} is the ability of the former, and not of the latter, to interact with tense in such a way that it can enable tense to “anchor” (in the sense of Tsai 2008; see below) the event expressed by the predicate. The reason why ta^{21}_{PERF} can do this while ta^{21}_{PROG} cannot has to do with their respective positions. In reference to the discussion in chapter 1, I assume that ta^{21}_{PERF} , though physically located in the highest inner aspect position (“RealizationP, see chapter 1), entertains a relation with the Outer aspect position, where it is interpreted. On the other hand, ta^{21}_{PROG} is located lower than ta^{21}_{PERF} , as a consequence of which it is too low to have a similar relationship with Outer Aspect. For the sentence to be grammatical, it needs other mechanisms to make sure the event argument is licensed; we will discuss this in detail below. Consequently, unlike ta^{21}_{PROG} , which always needs to be accompanied by other elements, ta^{21}_{PERF} can stand alone as no other elements are necessary to help tense license the event argument: it can do it itself. My analysis is hence different from previous investigations in two respects: First, perfective aspect is not located in Outer aspect position (as is generally assumed; see below), but in Inner aspect position. And second, the multifunction of ta^{21} is not decided upon by the semantics of verbs (as is often done, as we will see), but by the structural property of two different ta^{21} .

This chapter is organized as follows. In section 2.2, I present a more detailed description of the distribution and interpretation of ta^{21} . I show that ta^{21} can be interpreted as a completion/termination or a progressive marker, depending on the context. In section 2.3, I present an overview of the traditional analyses of the multiple functions of ta^{21} , which claim that the variation in the interpretation of ta^{21} depends on the semantic “dynamicity feature” of the verbs it attaches to, or argue that ta^{21} is a “transition” marker. Both approaches share the basic idea that there is only one particle ta^{21} . In section 2.4, I evaluate the “dynamicity feature” analysis and point out that the “dynamicity feature” is not the decisive factor that affects the interpretation of ta^{21} . I will also show that it is not sensible to treat ta^{21} as a “transition” marker. In section 2.5, I point out that it is unsatisfactory to take a single particle approach to ta^{21} . We will argue for the existence of two particles ta^{21} . In section 2.6, I provide an analysis to interpret the sentence final $tsai^{21}$, arguing that it is a present tense operator. In section 2.7, I provide an analysis to

distinguish ta^{21}_{PERF} from ta^{21}_{PROG} . I argued that the two particles are different in syntactic position. ta^{21}_{PROG} is lower than ta^{21}_{PERF} . Since in the course of derivation, ta^{21}_{PERF} can link up to TP, through the process of which the event argument is brought out, while this is impossible for ta^{21}_{PROG} . As a result, when ta^{21}_{PROG} is used the sentence always needs other elements to strengthen T so that it can license (“bring out”) the event variable. These elements include event modification, event coordination, event subordination, negation, sentence final elements relevant to tense etc. In this section I also point out that with the proposed analysis, we can provide an account for the fact that the use of ta^{21}_{PROG} always needs some extra elements to go with it. Section 2.8 is a summary for the chapter.

2.2 ta^{21} as a perfective marker and/or a progressive marker

In this section, I show that in eventive predicates ta^{21} is used as a perfective marker without any restrictions; in other cases, ta^{21} is used as a progressive marker but only after certain conditions have been satisfied.

2.2.1 ta^{21} as a perfective marker

In this section, I will show that ta^{21} is used as a perfective marker with eventive predicates. It is used to indicate that an event is presented as being terminated or completed. In what follows I first show that as a perfective marker, ta^{21} can stand alone in a sentence. Then I move on to show that ta^{21} can also be used as a progressive marker. However, when ta^{21} is used as progressive marker, the sentence always needs other elements to accompany it. We have seen (1), more examples can be seen in (5) - (8).

- (5) a. tsan³³ san³³ k^hu²⁴ pu?
 cry QM
 ‘Will Tsansan cry?’

- b. tsan³³ san³³ k^hu²⁴ ta²¹ .
 cry PERF
 'Tsansan cried.'

- (6) a. *tsan³³ san³³ ɕi²¹ i³³ fu.
 wash clothes
 b. tsan³³ san³³ ɕi²¹ ta²¹ i³³ fu.
 wash PERF clothes
 'Tsansan washed his clothes (not necessarily finished).'

- (7) a. *tsan³³ san³³ k^han⁴⁵ san³³ pən⁴¹ xu³³ .
 read three CL book
 b. tsan³³ san³³ k^han⁴⁵ ta²¹ san³³ pən⁴¹ xu³³ .
 read PERF three CL book
 'Tsansan read three books.'

- (8) a. *pei³³ tsi p^ho⁴⁵ .
 cup break
 b. pei³³ tsi p^ho⁴⁵ ka⁴¹ ta²¹ .
 cup break KA TA
 'The cup broke.'

In (5) - (8) we see that the (a) sentences, without *ta*²¹ are ungrammatical or, in the case of (5a), have an imperfective reading. After *ta*²¹ is used in (b) sentences, the ungrammatical sentences become grammatical, and they all have a perfective interpretation. *ta*²¹ in these sentences is used as a perfective marker. Note that *ta*²¹ is not allowed to follow a stative predicate. For example, (9b) - (10b) are ungrammatical.

- (9) a. t^ha³³ ɕi⁴¹ xoŋ³³ ɕou⁴⁵ ɕio²⁴ .
 3SG love math
 'He loves math.'
 b. *t^ha³³ ɕi⁴¹ xoŋ³³ ta²¹ ɕou⁴⁵ ɕio²⁴ .
 3SG love TA math

- (10) a. *t^ha*³³ *ɕin*⁴⁵ Wan¹³.
 3SG be family-named Wan
 'He has family name Wan.'
 b. **t^ha*³³ *ɕin*⁴⁵ *ta*²¹ Wan¹³.
 3SG be family-named TA Wan

Verbs like *ɕi⁴¹xoŋ³³* 'love', *ɕin⁴¹* 'be family named', *iou⁴¹* 'have', and *shou²⁴u¹³* 'belong to', etc. are incompatible with *ta*²¹.

In short, the above shows that, with eventive predicates, *ta*²¹ is used as a perfective marker, indicating that an event has been completed/terminated. Normally, *ta*²¹ is not acceptable in stative predicates.

In what follows I introduce another case, in which *ta*²¹ can only be interpreted as a progressive marker. However, the context in which *ta*²¹ functions as a progressive marker depends on a number of conditions. It seems that whenever *ta*²¹ is used as a progressive marker, the sentence always needs some other elements. For instance, it is a negative construction, or the sentence is modified by an adverbial phrase.

2.2.2 *ta*²¹ as a progressive marker

As is shown above, generally, with non-stative verbs, *ta*²¹ is used as a perfective marker, indicating that an action has been completed/terminated. In this section, I will show that in certain contexts *ta*²¹ is used to indicate the ongoingness/progression of an action. These contexts are: (i) sentences with a negation; (ii) sentences which are modified by manner, instrumental or locative adverbs, or quantification; and (iii) sentences with a progressive marker.

2.2.2.1 *ta*²¹ with negation

There are two negation markers in Chángshā, one is *pu*²⁴ 'not', which is used to negate subjective intention, expressing prohibition and unwillingness; another is *mau*²¹ 'not have', which negates the occurrence of events. If a sentence is

modified by the negation marker *mau*²¹ 'not (have)', the action presented with *ta*²¹ can only have a progressive reading. Compare (11a) and (11b).

- (11) a. t^ha³³ mau²¹ k^han⁴⁵ tɿən⁴⁵si⁴¹.
 3SG NEG watch TV
 'He did not watch TV.'
 b. t^ha³³ mau²¹ k^han⁴⁵ ta²¹ tɿən⁴⁵si⁴¹.
 3SG NEG watch TA TV
 'He was not watching TV.'
 NOT: 'He did not watch TV.'

In (11a), the negation marker *mau*²¹ 'not (have)' is used, *ta*²¹ is not used, and the sentence can have a perfective reading. Interestingly, (11b) contains the negation marker *mau*²¹ 'not (have)' as well as the element *ta*²¹: in this sentence, the action presented can only have a progressive reading. More examples are given in (12) - (13), where both members of each pair contain *ta*²¹, however, events in the (a) sentences are presented as having been completed, while events in the (b) sentences are presented as ongoing.

- (12) a. t^ha³³ ɕi⁴¹ ta²¹ i³³fu.
 3SG wash TA clothes
 'He washed his clothes.'
 b. t^ha³³ mau²¹ ɕi⁴¹ ta²¹ i³³fu.
 3SG NEG wash TA clothes
 'He was not washing his clothes.'
- (13) a. tsan³³ san³³ shan²¹ wu⁴¹ kao⁴¹ ta²¹ uɕi⁴¹ shən³³.
 this morning do TA cleaning
 'Tsansen did cleaning this morning.'
 b. tsan³³ san³³ shan²¹ wu⁴¹ mau²¹ kao⁴¹ ta²¹ uɕi⁴¹ shən³³.
 this morning NEG do TA cleaning
 'Tsansen was not doing the cleaning this morning.'

The sentences in (11) - (13) show that if *ta*²¹ appears with the negation marker *mau*²¹, the action described is presented as ongoing. *ta*²¹ is the marker of the progressive reading. In what follows I show that in a sentence which is modified by an adverbial, such as a manner adverbial, the use of *ta*²¹ can produce a progressive reading.

2.2.2.2 *ta*²¹ with manner adverbials

Adverbials normally precede the verb in Chángshā. When an activity verb is modified by a certain type of adverb, the sentence is ambiguous. It can be interpreted as either a progressive or as a perfective sentence. These modifiers include *manner*, *locative* and *instrumental* adverbs, as illustrated in (14) - (15).

- (14) a. t^ha³³ ma²⁴ ta²¹ tsuo²⁴tsi⁴¹.
 3SG clean TA desk
 'He cleaned the desk.'
 NOT: 'He is cleaning the desk.'
- b. t^ha³³ fei³³k^huai⁴⁵ti ma²⁴ ta²¹ tsuo²⁴tsi⁴¹.
 3SG quickly clean TA desk
 'He cleaned the desk quickly.'
 'He is cleaning the desk quickly.'
- (15) a. t^ha³³ ɕiɛ⁴¹ ta²¹ tsi²¹.
 3SG write TA character
 'He wrote character(s).'
 NOT: 'He is writing characters.'
- b. t^ha³³ in²¹ tso⁴¹shou⁴¹ ɕiɛ⁴¹ ta²¹ tsi²¹.
 3SG use left hand write TA characters
 'He wrote characters with his left hand.'
 'He is writing characters with his left hand.'

In (14a), *ta*²¹ is interpreted as a perfective marker only, while in (14b), where the sentence is modified by the manner adverb *fei*³³*k*^h*uai*⁴⁵*ti* 'quickly', *ta*²¹ can be interpreted as a progressive marker indicating that the action is ongoing as

well (next to the use as a perfective marker). The ambiguous interpretation of *ta*²¹ can be observed in (15a) and (15b) as well. The difference is that in the latter the predicate is modified by the instrumental adverb *in*²¹ *tsuo*⁴¹ *shou*⁴¹ 'with his left hand'. The fact that the interpretation of *ta*²¹ seems to be influenced by adverbial modifiers is further illustrated in (16) - (18).

- (16) a. t^ha³³ uan²¹ ta²¹ la⁴¹ fu⁴¹ fa²¹.
 3SG stare TA that CL picture
 'He stared at that picture.' (Only interpretation possible)
- b. t^ha³³ tai³³ tai³³ ti²¹ uan²¹ ta²¹ la⁴¹ fu⁴¹ fa²¹.
 3SG attentively stare TA that CL picture
 'He is staring at that picture attentively.'
 'He stared at that picture attentively.'
- (17) a. ta³³ kən³³ ta²¹ ŋo⁴¹.
 3SG follow TA me
 'He followed me.' (Only interpretation possible)
- b. ta³³ tɕ^hiao⁴¹ tɕ^hiao⁴¹ ti²¹ kən³³ ta²¹ ŋo⁴¹.
 3SG quietly follow TA 1SG
 'He followed me quietly.'
 'He is following me quietly.'
- (18) a. t^ha³³ k^hau³³ ta²¹ mən¹³.
 3SG knock TA door
 'He knocked at the door. (Only interpretation possible) '
- b. t^ha³³ tɕ^hiao⁴¹ tɕ^hiao⁴¹ ti²¹ k^hau³³ ta²¹ mən¹³.
 3SG lightly knock TA door
 'He knocked at the door lightly.'
 'He is knocking the door lightly.'

*ta*²¹ in (16a) can only be interpreted as a perfective marker; in (16b), it can be interpreted as a perfective marker and it can also be interpreted as a progressive marker. The same is true in (17). In (17a), *ta*²¹ only has a perfective reading,

while in (17b), where the sentence is modified by manner adverb $t\phi^{hiao^{41}}t\phi^{hiao^{41}}ti$ 'quietly', ta^{21} can refer to the ongoingness or completion/termination of the action. Similarly, in (18b), the adverb $t\phi^{hin}t\phi^{hin}ti$ 'quietly' is used, and the action is interpreted as ongoing or completion/termination, without the adverbial, the action has to be interpreted as being terminated.

The above shows that in certain contexts ta^{21} is a progressive marker, which leads to the conclusion that we have two ta^{21} s, a perfective marker and a progressive marker. In what follows I show that ta^{21} can occur in sentences presented in the progressive marked by preverbal marker $tsai^{21}ko^{24}$.

2.2.2.3 ta^{21} with the progressive marker $tsai^{21}ko^{24}$

In section 2.2.1 we have seen that ta^{21} is used as a perfective marker; it indicates that an action has been completed/terminated. In section 2.2.2, we have seen that in some cases, the interpretation of ta^{21} is ambiguous: it can be interpreted as a perfective marker, but it can also be interpreted as an imperfective marker indicating the ongoingness of an action. In the present section, I show that ta^{21} can be used with predicates modified by preverbal $tsai^{21}ko^{24}$ which is the marker of the progressive aspect.

In most varieties of the Xiāng dialect, progressive aspect is expressed by the preverbal progressive marker $tsai^{21}ko^{24}(li)$ or $tsai^{21}la^{45}(li)$, originating from the locative phrases $tsai^{21}ko^{24}li$ 'here' and $tsai^{21}la^{45}li$ 'there' respectively. $tsai^{21}ko^{24}$ has become a grammaticalized progressive marker in Chángshā. $tsai^{21}ko^{24}$ and preverbal locative phrases are not allowed to co-occur in one sentence, see (19).

- (19) a. $t^h a^{33}$ $tsai^{21}ko^{24}$ $k^h an^{41}$ $ti\phi n^{45} si^{41}$.
 3SG PROG watch TV
 'He is watching TV.'
- c. $*t^h a^{33}$ $tsai^{21}$ $t\phi ia^{33}$ li $tsai^{21}ko^{24}$ $k^h an^{41}$ $ti\phi n^{45} si^{41}$.
 3SG LOC home in PROG watch TV

(19a) illustrates the progressive aspect, expressed by *tsai*²¹*ko*²⁴. (19b) shows that when the locative phrase *tsai*²¹ *tɕia*³³*li* 'at home' is used, the sentence also has a progressive reading. (19c) shows that the locative phrase *tsai*²¹ *tɕia*³³*li* 'at home' is not allowed to co-occur with preverbal *tsai*²¹*ko*²⁴.

What is interesting is that generally, *ta*²¹ can optionally combine with the progressive *tsai*²¹*ko*²⁴ in an activity predicate. The combination produces a progressive reading, and no completion reading is available. This is illustrated in (20).

- (20) a. *ŋo*⁴¹ *kʰan*⁴¹ *ta*²¹ *tiən*⁴⁵*ʃhi*⁴¹.
 1SG watch TA TV
 'I watched TV.'
- b. *ŋo*⁴¹ *tsai*²¹ *ko*²⁴ *kʰan*⁴¹ *ta*²¹ *tiən*⁴⁵*ʃhi*⁴¹.
 1SG PROG watch TA TV
 'I am/keep watching TV.'
- c. *ŋo*⁴¹ *tsai*²¹ *ko*²⁴ *kʰan*⁴¹ *tiən*⁴⁵*ʃhi*⁴¹.
 1SG PROG watch TV
 'I am watching TV.'

In (20a), *ta*²¹ indicates that the action has been completed/terminated. In this sentence, *ta*²¹ functions as a perfective marker. In (20b), with the preverbal *tsai*²¹*ko*²⁴, *ta*²¹ can also appear. The sentence produces a reading of ongoingness. Note that *ta*²¹ is not obligatory, but it leads to a slight difference in interpretation. If the *tsai*²¹*ko*²⁴ and *ta*²¹ are used, the sentence emphasizes a continuation of the ongoing action; if only the progressive marker is used, the sentence only indicates that the action is going on. For instance: suppose that Lisi asks Tsansan to play ball with him, and Tsansan does not want to go, he would say (20b) rather than (20c). In uttering this sentence, Tsansan implies that he is already involved in watching TV, which is not going to stop, so he is not going to play ball with Lisi. In contrast, when Lisi asks Tsansan: "What are you doing?" Tsansan would answer the question with (20c) rather than (20b). So with the combination of *ta*²¹ and the progressive marker *tsai*²¹*ko*²⁴, the sentence focuses more on the continuation of an ongoing action, whereas if

only the progressive marker is used, the sentence just means that an action is ongoing, it is a description of an action in progress.

To show that *ta*²¹ can be used in combination with the progressive marker *tsai*²¹*ko*²⁴, more examples are given in (21) - (22).

- (21) a. $\eta o^{41} m\acute{a}n^{13}$ ta^{41} ta^{21} $ma^{13} t\check{c}ian^{45}$.
 1PL play TA mahjong
 'We played mahjong.'
 NOT: 'We are playing mahjong.'
- b. $\eta o^{41} m\acute{a}n^{13}$ $tsai^{21} ko^{24}$ ta^{41} ta^{21} $ma^{13} t\check{c}ian^{45}$.
 1PL PROG play TA mahjong
 'We are playing mahjong.'
 NOT: 'We played mahjong.'
- (22) a. $\eta o^{41} m\acute{a}n^{13}$ $t\check{c}i^{h:41}$ ta^{21} $fan^{13} tsi$.
 1PL build PERF house
 'We built a house.'
 NOT: 'We are building a house.'
- b. $\eta o^{41} m\acute{a}n^{13}$ $tsai^{21} ko^{24}$ $t\check{c}i^{h:41}$ ta^{21} $fan^{13} tsi$.
 1PL PROG build TA house
 'We are building a house.'
 NOT: 'We built a house.'

*ta*²¹ in (21a) - (22a) can only be interpreted as a perfective marker, no other reading is available. In (21b) - (22b), the progressive marker *tsai*²¹*ko*²⁴ is used, *ta*²¹ can be used in combination with it, but now the sentence produces a progressive reading (with the same connotation as in (20): the sentence not only emphasizes the ongoingness of the action, but also indicates the continuation of it).

In sum, above, three cases with *ta*²¹ are introduced. We have seen that in negative sentences with *ta*²¹, the sentences are interpreted as negating an ongoing action; in sentences with both *ta*²¹ and manner (or instrumental adverbials), the events described can have either a completion or a progressive

reading; in sentences with both *ta*²¹ and the preverbal progressive marker, the events described can only have a progressive reading.

In what follows I show another context, in which the interpretation of the sentences varies depending on whether *ta*²¹ is used.

2.2.2.4 *ta*²¹ with sentence final *tsai*²¹*ko*²⁴

The above shows that *ta*²¹ can be combined with the preverbal *tsai*²¹*ko*²⁴ in a sentence with a progressive reading. In this section, I show that in Chángshā *tsai*²¹*ko*²⁴ can also appear in sentence final position (in section 2.6, I will provide an analysis to clarify its main function). What is relevant to this observation is that in a sentence describing an activity, *ta*²¹ is obligatory. This is illustrated in (23).

- (23) a. $\eta o^{41} m\acute{a}n^{13}$ ta^{41} ta^{21} $ma^{13} t\phi ian^{45}$ $tsai^{21} ko^{24}$.
 1PL play TA mahjong TSAIKO
 'We are playing mahjong.'
 NOT: 'We played mahjong.'
- b. $*\eta o^{41} m\acute{a}n^{13}$ ta^{41} $ma^{13} t\phi ian^{45}$ $tsai^{21} ko^{24}$.
 1PL play mahjong TSAIKO
- c. $\eta o^{41} m\acute{a}n^{13}$ ta^{41} ta^{21} $ma^{13} t\phi ian^{45}$.
 1PL play TA mahjong
 'We played mahjong.'
 NOT: 'We are playing mahjong.'
- d. $tei^{54} ts^h\acute{a}^{33}$ fan^{33} ta^{21} $tsai^{21} ko^{24}$.
 car turn over TA TSAIKO
 'The car turned over.'

In (23a), sentence final *tsai*²¹*ko*²⁴ is used. In this case, as we see in (23b), *ta*²¹ is obligatory, as opposed to the sentences in which preverbal *tsai*²¹*ko*²⁴ is used, in which case, *ta*²¹ is optional. Note that to produce a progressive reading in a sentence with *ta*²¹, sentence final *tsai*²¹*ko*²⁴ must be present. Otherwise, the sentence only has a perfective reading, as is shown in (23c) (the explanation of this interaction between sentence final *tsai*²¹*ko*²⁴ is provided in Section 2.7.1).

Note that I have mentioned in the beginning that in Mandarin with *holding* verbs, both the perfective marker *le* and durative marker *zhe* are acceptable. However in Chángshā, all we have is multi-functional *ta*²¹. Before I close off this introduction of the distribution and interpretation of *ta*²¹ in different contexts, I will present a few examples to show the use of *ta*²¹ with holding verbs.

With holding verbs, *ta*²¹ can be interpreted as a perfective marker; it can also be interpreted as an imperfective marker.

- In sentences (24) - (25), ta^{21} can have two interpretations: on the one hand, it can indicate that the actions have been completed, on the other, it can also be interpreted as a durative marker, indicating the continuation of the state produced by the action after it has been completed. In the latter case, for example, in (24), if ta^{21} is interpreted as a durative marker, the sentence means Tsansan was holding a basket.

That *ta*²¹ can have these two interpretations can be shown in sentences involving adverbial modification.

- (26) a. tsan³³ san³³ tsuo¹³ t^hiən³³ tia²⁴ ta²¹ i¹³ tsa²⁴ lan²⁴ tsi .
 yesterday take TA one CL basket
 'Tsansen was holding a basket yesterday.'
 'Tsansen took a basket yesterday.'
- b. tsan³³ san³³ i²⁴ tsi²⁴ tia²⁴ ta²¹ i¹³ tsa²⁴ lan²⁴ tsi .
 continuously hold TA one CL basket
 'Tsansen was holding a basket continuously.'

The sentence in (26a) is modified by the temporal adverb *tsuo*¹³ *t^hiən*³³ 'yesterday', and *ta*²¹ can have two interpretations. By contrast, in (26b), the sentence is modified by the adverb *i*²⁴ *tsi*²⁴ 'continuously', and *ta*²¹ can only be interpreted as a durative marker.

More examples can be seen with *placement* verbs such as *fan*⁴⁵ 'put', *kua*⁴⁵ 'hang', or *posture* verbs, like *tso*²¹ 'sit', *tsan*⁴⁵ 'stand', and *tan*⁴⁵ 'lie' etc.

- (27) tso²⁴ tsi shan²¹ fan⁴⁵ ta²¹ i²⁴ pən⁴¹ xy³³.
 desk on place TA one CL book
 'A book was lying on the desk.'
- (28) mən¹³ kou⁴¹ tsan⁴¹ ta²¹ xə²⁴ to³³ zən¹³.
 door stand TA many people
 'Many people were standing at the door.'
 'Many people got/came to stand at the door.'

As indicated, *ta*²¹ in (27) - (28) can be understood either as indicating the completion of the action or the duration of the state produced by the action. Take (28): if *ta*²¹ is understood as a completive marker, the sentence means that a lot of people came to stand at the door; the sentence focuses on the completion of the action, and the speaker is not concerned with the result state. In a result state reading, on the other hand, the focus of the sentence is on the duration of the result state produced by the action, and the completion of the process is irrelevant.

To distinguish the two interpretations more clearly, we can use adverbs like *xə*⁴¹ *k^huai*⁴⁵ 'very quickly' and quantification adverbs like *tsən*⁴¹ *si*²⁴ 'always', this is done in (29a)- (29b).

- (29) a. *mən*¹³ *kou*⁴¹ *xə*⁴¹ *k^huai*⁵⁴ *tsan*⁴¹ *ta*²¹ *xə*⁴¹ *to*³³ *zən*¹³.
 door very quickly stand TA many people
 'Many people came to stand at the door quickly.'
- b. *mən*¹³ *kou*⁴¹ *tsən*⁴¹ *si*²¹ *tsan*⁴¹ *ta*²¹ *xə*⁴¹ *to*³³ *zən*¹³.
 door always stand TA many people
 'Many people are always standing at the door.'

The adverb *xə*⁴¹ *k^huai*⁴⁵ 'very quickly' is used in (29a), and *ta*²¹ can only have a completion reading; the reading of duration is not available. In (29b), the adverb *tsən*⁴¹ *si*²⁴ 'always' is used, and *ta*²¹ can only express the continuation of the result state; the completion reading is not available.

The above shows that with some verbs, *ta*²¹ can be interpreted as a durative marker as well as completion marker, or at least so it seems; we will briefly return to the *holding* verbs in 2.5 below. Comparatively, in Mandarin, in the same case, these two interpretations depend on whether *le* or *zhe* is used. I am going to provide an analysis for this multifunctionality of *ta*²¹ and its relation with *zhe* in Chapter 4.

2.2.4 Summary

To sum up, in this section I have shown three types of contexts in which *ta*²¹ is used with different interpretations. I have shown that with non-stative predicates, *ta*²¹ is used to present an event as having been completed/terminated; whether *ta*²¹ can get a completion or termination reading depends among other things on the properties of the event. Generally, *ta*²¹ is not allowed with stative predicates. We have also seen that in similarly eventive sentences, *ta*²¹ can also be interpreted as a progressive marker. For *ta*²¹ to be interpreted as a progressive marker, though, we saw that it must always be accompanied by another element in the sentence. For convenience, the distribution and interpretation of *ta*²¹ is presented in table 1 (excluding

sentences with holding verbs, which form a special case as we just saw, and as we briefly see again in 2.5 below).

Table 1. Reading of *ta*²¹

	perfective	imperfective
with bare eventive predicate	√ e.g. (2b), (5)-(8)	*
with negation	*	√ e.g. (11b), (12b), (13b)
with manner adverbs	√ e.g. (15) - (18b)	√ e.g. (15) - (18)
with preverbal <i>tsai</i> ²¹ <i>ko</i> ²⁴	*	√ e.g. (20b), (21b)
with sentence final <i>tsai</i> ²¹ <i>ko</i> ²⁴	*	√ e.g. (23c), (23d)

These observations are interesting: How can one marker express two notions (perfective and progressive) that seem so different? How can we keep the contrasting meanings of *ta*²¹ apart? Is there just one *ta*²¹, which is, say, a perfective marker with the possibility of deriving the progressive reading from it (or the other way around)? Or are there two distinctive *ta*²¹s which happen to have the same form? Before I provide an answer to these questions, let me first introduce the analyses available in the literature.

2.3 Literature introduction

2.3.1 *ta*²¹ as a completive or a progressive/durative marker—a case of overlap

In the earlier literature, it is widely accepted that *ta*²¹ is multifunctional. It can be used to indicate that an action is terminated/completed, in progress or that it indicates the continuation of the state presented in the event (Lǐ 1991; Wǔ 1999;

Lú 2007). Lǐ (1991) claims that "*ta*²¹ has two functions: one is that it is used as a modal particle, and the other is that it is used as an aspect marker, when *ta*²¹ is used as an aspect marker, it is equivalent to *zhe*, *le* in Mandarin ..." (interpreted from Lǐ 1991:540). In Zhōu (1998), *ta*²¹ is treated as a past tense marker, equivalent to *le* in Mandarin (Zhōu 1998:9). Wu (1999) claims that "the usage of *ta*²¹ as an aspectual marker is more or less the same as that of the standard Chinese *le* and *zhe*, where *le* is used as a Perf(ective) aspect marker, and *zhe* is used as a Con(tinuous) marker" (Wǔ 1999:59). Lú (2007) suggests that *ta*²¹ is like *le*, *guo* (for experiential aspect), and *zhe* in Mandarin (Lú 2007:230).

Regarding the multiple aspectual functions of *ta*²¹, it is widely believed that the interpretation of *ta*²¹ varies depending on the semantic "dynamicity feature" of the verbs it co-occurs with (Cuī 1997; Lú 2007). Cuī (1997) points out that if the verb *ta*²¹ attaches to is dynamic, *ta*²¹ is a perfective marker, while if the verb it attaches to is stative, *ta*²¹ is interpreted as a durative marker. For example, since in (30a) the verb *tɕʰia*²⁴ 'eat' is dynamic, *ta*²¹ indicates that the action is completed; while in (30b), the verb *xui*⁴⁵ 'sleep' is static, and *ta*²¹ expresses that the state of lying down continued.

- (30) a. t^ha³³ tɕʰia²⁴ ta²¹ i¹³ tsa¹³ pin¹³ko⁴¹.
 3SG eat TA one CL apple
 'He ate one apple.'
- b. t^ha³³ tsai²¹ tsuan¹³ shan²¹ xui⁴¹ ta²¹.
 3SG LOC bed on sleep SFP
 'He was sleeping on the bed.'

Lú (2007) makes the same claim as Cuī (1997). She suggests that *ta*²¹ has a cross-categorical function when used as an aspect marker. In order to resolve the ambiguity, we need to rely on the semantics of the verb and the context (Lú 2007). Following Cuī (1997), Lú assumes that as a perfective marker, *ta*²¹ follows a dynamic or instantaneous verb, e.g. *ɕi*⁴¹ 'wash', *tsʰan*⁴⁵ 'sing', *tsou*⁴¹ 'walk', *xue*²⁴ 'say', *kʰu*²⁴ 'cry', *tiao*⁴⁵ 'jump'. When appearing with a stative verb, *ta*²¹ indicates the duration of a state. In her analysis, verbs of *posture*, *wearing* and *placement* such as *tso*²¹ 'sit', *tsan*⁴⁵ 'stand', *kua*⁴⁵ 'hang', *kʰao*⁴⁵ 'lean', etc. are

classified as stative verbs (Lú 2007:233). Lú attributes the ambiguous interpretation of *ta*²¹ to the context. She claims: "There are cases in which we need to make use of the contexts to distinguish the interpretation of *ta*²¹" (Lú 2007:233). (31) is from Lú(2007:233).

- (31) a. tsan³³ san³³ la²⁴ ta²¹ i³³ tsa²⁴ xu³³ pao³³ k^hə⁴⁵ ka⁴¹ ta²¹.
 take TA one CL schoolbag leave KA PERF
 'Tsansan took a schoolbag and left.'
 b. tsan³³ san³³ la²⁴ ta²¹ i³³ tsa²⁴ xu³³ pao³³ tsai²¹ shou⁴¹ li.
 take TA one CL school-bag LOC hand in
 'Tsansan is holding a schoolbag in his hand.'

According to Lú (2007), sentence (31a) contains two actions. Following the verb expressing the first action, *ta*²¹ is a perfective marker. In (31b), the sentence describes a stative situation, possibly enforced by the locative phrase *tsai*²¹ *shou*⁴¹ *li* 'in his hand', with *ta*²¹ indicating the duration of a state.

2.3.2 *ta*²¹ as a "transition" marker

In contrast to the above analyses, I have suggested elsewhere that the multiple functions of *ta*²¹ can be unified (Lǚ 2010). I proposed that *ta*²¹ is a perfective marker, indicating the transition of an action/state from [-φ] to [φ] (Lǚ 2010:234). For example, sentence (30a) can be interpreted as meaning that Tsansan has gone from the state of not eating the apple to the state of having eaten the apple. Similarly, sentence (24) is interpreted as meaning that Tsansan has moved from the state of not holding a book to the state of holding a book. See (32) - (33).

- (32) tsan³³ san³³ tɕ^hia²⁴ ta²¹ la⁴⁵ tsa²⁴ pin¹³ ko⁴¹.
 eat TA that CL apple
 'Tsansan ate that apple, (not necessary finished that apple).'

- (33) tsan³³ san³³ tia²⁴ ta²¹ i¹³ tsa²⁴ lan²⁴ tsi .
 take TA one CL basket
 a. 'Tsansan is holding a basket.'
 b. 'Tsansan took a basket.'

Under the transition approach, there is no need to wonder whether *ta*²¹ expresses an action as being terminated/completed, or whether it expresses the ongoing existence of the result state as is shown in (32) and (33). In both cases, *ta*²¹ is to indicate the transition from one state to another. For example in (33), *ta*²¹ indicates that Tsansan has changed from a state of not holding a basket to a state of holding a basket.

2.3.3 Summary

In section 2.3 I introduced two approaches from the literature to the use of *ta*²¹ as a perfective or imperfective marker. One of them argues that the verb feature "dynamicity" can be used to disambiguate the interpretation of *ta*²¹. That is, if the verb which *ta*²¹ attaches to is dynamic, *ta*²¹ indicates that the action presented has been completed/terminated, while if the verb which it attaches to is stative, *ta*²¹ indicates the duration of the result state or the ongoingness of the action. Another approach proposes to reinterpret *ta*²¹ as indicating the transition of the action/state denoted by the verb from one state to another.

In what follows I evaluate these analyses in some detail and point out that the verb feature "dynamicity" is not a decisive factor in disambiguating the interpretation of *ta*²¹. I also point out that the "transition" analysis in which *ta*²¹ is used to indicate that an event has changed from one state to another is not in itself sufficient to cover the variation in the interpretation of *ta*²¹.

2.4 Critics of earlier accounts

2.4.1 "Dynamicity" is not relevant to *ta*²¹

In this section, I provide a review of the traditional analysis of the variation in the interpretation of *ta*²¹. I point out that there are four sets of data that can help

argue against the idea that the interpretation of ta^{21} is dependent on the verb feature 'dynamicity'.

First, I would like to point out that ta^{21} does not necessarily indicate that an action has been terminated/completed even if the verb it attaches to is dynamic. For example, as we have seen, in sentences modified by a manner adverb, ta^{21} cannot only indicate the completion of the action but also its ongoingness ((34) - (35)).

- (34) a. $t^h a^{33}$ $k^h an^{45}$ ta^{21} la^{45} $pən^{45}$ xu^{33} .
 3SG read TA that CL book
 'He read that book.'
- b. $t^h a^{33}$ $zən^{21}$ $zən^{21}$ $tsən^{33}$ $tsən^{33}$ ti $k^h an^{45}$ ta^{21} la^{45} $pən^{45}$ xu^{33} .
 3SG attentively read TA that CL book
 'He is reading that book attentively.'
 'He read that book attentively.'
- (35) a. $t^h a^{33}$ uan^{21} ta^{21} la^{41} $pən^{41}$ xu^{33} .
 3SG look TA that CL book
 'He took a look at the book.'
- b. $t^h a^{33}$ tai^{33} tai^{33} ti^{21} uan^{21} ta^{21} la^{41} $pən^{41}$ xu^{33} .
 3SG attentively look TA that CL book
 'He is looking at that book attentively.'
 'He took a look at that book attentively.'

The verbs in (34) - (35) are all activities. Contrary to what is suggested by the traditional analysis, ta^{21} in (34b) - (35b) either indicates the completion or the ongoingness of the action. (34) - (35) show that the apparently ambiguous interpretation of ta^{21} cannot be attributed to the semantic feature "dynamicity" of verbs, since the verbs in (34) - (35) are all dynamic, and when they are followed by ta^{21} , the sentences cannot only produce a completion reading, but also a progressive reading.

That the interpretation of ta^{21} is not dependent on "dynamicity" is also confirmed by the observation that in activities modified by sentence final

$tsai^{21}ko^{24}$, ta^{21} can only be interpreted as a progressive marker. We have seen such sentences above. More examples can be seen in (36).

- (36) a. $t^h a^{33}$ ϕi^{41} ta^{21} $i^{33}fu$ $tsai^{21}ko^{24}$.
 3SG wash TA clothes TSAIKO
 'He is washing clothes.'
- b. $t^h a^{33}$ kai^{45} ta^{21} $fan^{13}tsi$ $tsai^{21}ko^{24}$.
 3SG build TA house TSAIKO
 'He is building (a) house(s).'

The verbs ϕi^{41} 'wash' and kai^{45} 'build' are dynamic verbs, yet ta^{21} is not interpreted as a perfective marker. This shows that we cannot relate the interpretation of ta^{21} to the properties of the predicates ta^{21} attaches to. Note that for (36), one may argue that possibly the progressive reading comes from sentence final $tsai^{21}ko^{24}$, but in section 2.6.2, we will argue that this is not the case.

The third set of data which show that the interpretation of ta^{21} does not vary in accordance with the dynamic properties of verbs comes from the use of ta^{21} in *posture*, *wearing* and *placement* verbs. In the traditional analysis, these verbs are treated as stative predicates (Lu 2006:22). However, we know that the properties of these verbs are debatable: at least some *posture* verbs can be seen as being dynamic if the subject is agentive. What is relevant is that following these verbs, ta^{21} is actually better treated as a perfective marker in a-sentences in (37) - (38) (37 is adapted from (29)).

- (37) a. $mən^{13}kou^{41}$ $i^{13}xia^{21}tsi$ $tsan^{41}$ ta^{21} $xə^{41}to^{33}zən^{13}$.
 door suddenly stand TA many people
 'Many people came to stand at the door all of a sudden.'
- b. $mən^{13}kou^{41}$ $xə^{41}to^{33}$ $zən^{13}$ $tsan^{41}$ ta^{21} .
 door many people stand TA
 'There are many people standing at the door.'

- (38) a. tsuo²⁴ tsi shan²¹ i⁴¹ tɕin³³ fan⁴¹ ta²¹ i²⁴ pən⁴¹ xu³³.
 desk on already place TA one CL book
 'A book has already been placed on the desk.'
- b. i²⁴ pən⁴¹ xu³³ tsai²¹ tsuo²⁴ tsi shan²¹ fan⁴¹ ta²¹.
 one CL book LOC desk on place TA
 'A book is lying on the desk.'

In Lǐ (1991), Zhōu (1998), Wú (1999) and X.Q.Lú (2007), the verbs in these sentences are seen as stative verbs, and *ta*²¹ is argued to be a durative marker. However, while the a-examples already show that this cannot be the whole story, we could even argue that with verbs like these, the non-perfective reading of *ta*²¹ is actually derived from the perfective *ta*²¹. We have reached a certain state by the completion of an event (e.g., getting up or putting down) and the supposed durative reading is the continuing existence of the result state.

Fourthly, if it is true that *ta*²¹ indicates the continuation of a state with stative verbs, we would expect that *ta*²¹ can be used in states described by general stative verbs. This is, however not the case. *ta*²¹ cannot be used to indicate the duration of a state expressed by a stative verb. This is illustrated in (39).

- (39) a. *ta³³ tsai²¹ Shan⁴¹ xai⁴¹ tɕu²¹ ta²¹.
 3SG LOC Shanghai live TA
- b. ta³³ tsai²¹ Shan⁴¹ xai⁴¹ tɕu²¹.
 3SG LOC Shanghai live
 'He lives in Shanghai.'

The verb *tɕu*²¹ 'live' in (39) is a stative verb, and *ta*²¹ cannot be used. If *ta*²¹ is able to indicate the continuation of a state in a stative predicate, (39a) should be acceptable. However, this is not the case: (39a) is ungrammatical.

Finally, the traditional analysis fails to account for the fact that *ta*²¹ is compatible with the progressive aspect which is indicated by preverbal *tsai*²¹ *ko*²⁴. Progressive aspect selects non-stative predicates, so the compatibility of *ta*²¹ with the progressive makes it impossible to maintain the idea that *ta*²¹ expresses the perfective meaning in dynamic predicates. Since

progressive and perfective are semantically contrasting, it is hard to justify the combination of the two if we maintain that ta^{21} is perfective, and can only be perfective with dynamic verbs.

To sum up, the above arguments show that it is not sensible to attribute the multiple functions of ta^{21} to the verb feature "dynamicity". With one and the same "dynamicity" verb, ta^{21} can be interpreted as perfective or progressive, or in any case, it is compatible with a non-perfective reading, like in sentences with certain adverbs or with sentence final $tsai^{21}ko^{24}$.

2.4.2 ta^{21} is not a "transition" marker

To deal with the observation that ta^{21} is used to express the perfective or imperfective aspect, I tried before to unify the multiple uses of ta^{21} by proposing that ta^{21} is basically a perfective marker (Lǚ 2010). I argued that the main function of ta^{21} is to indicate that the denoted event or state has completed a transition from one state to another. By arguing that ta^{21} is a transition marker, I avoid the ambiguous status of ta^{21} . However, this approach is far from satisfactory. This is because there are data that the "transition" approach fails to account for. For example, in an activity modified by the negative marker, ta^{21} can only indicate the duration of the action. See (40).

- (40) a. $t^h a^{33}$ $k^h an^{45}$ ta^{21} $tian^{45} si^{41}$.
 3SG watch TA TV
 'He watched TV.'
- b. $t^h a^{33}$ mau^{21} $k^h an^{45}$ ta^{21} $tian^{45} si^{41}$.
 3SG NEG watch TA TV
 'He is not watching TV.'
 NOT: 'He did not watch TV.'

If ta^{21} is a transition marker, it is not clear why ta^{21} is used as a perfective marker in (40a), whereas it is used as a progressive marker in (40b). Furthermore, the transition approach cannot provide an account for the combination of ta^{21} with the progressive marker, preverbal $tsai^{21}ko^{24}$. The reason is as mentioned above, that it is hard to justify the combination of two

particles with contrasting meanings. Given these considerations, I conclude that the transition approach leaves too many questions open.

2.4.3 Intermezzo: ta^{21} as a marker of "posttime"

Under the single ta^{21} hypothesis, we may entertain another possibility (which seems reasonable but which eventually will be discarded). We may argue that ta^{21} is a "marked" perfective marker. With the expression "marked" perfective marker, we mean a marker that indicates not only the completion of the action but also the continuation of the result state caused by the action. This definition of perfective marker is different from what Comrie (1976) has defined, which we call unmarked perfective. That is, we take the unmarked perfective as "indicating the view of a situation as a single whole without distinction of the various phases that make up that situation" (Comrie 1976:16). Similarly, Smith (1991) claims that the perfective represents a situation as a single whole, and the span of the perfective includes the initial and final-endpoint of the situation (Smith 1991:103). As a "marked" perfective marker, ta^{21} does not only indicate termination/completion of an event but also the period after the completion. This seems plausible since we have seen that normally, in non-stative predicates, ta^{21} is used to express the perfective meaning. Only under specific circumstances can ta^{21} be interpreted as indicating the continuation/ongoingness of an action. This approach can provide a direct account for *posture*, *wearing*, *holding* and *placement* verbs as these verbs share the property of typically producing a result state after the actions are completed. With all these verbs, ta^{21} can have two interpretations: it can be interpreted as indicating the completion of an action and it also can be interpreted as indicating the continuation of the result state. With the proposed analysis, we can argue that the continuation of the state is part of the function of ta^{21} : it indicates not only the endpoint of the action but also the time span after the completion of the action.

The observation that verbs produce result states after the action has been completed is not restricted to Chángshā. In dealing with the perfective in Dëne Sųliné Chipewyan, an Athabaskan language of Northern Canada, Wilhelm (2007) points out that the common analysis of the perfective, in which a

situation is presented as a whole, does not work for the perfective in Däne. This is because according to her, in Däne, activities entail not only termination but also event completion when they appear in the perfective (Wilhelm 2007:49). Wilhelm points out that "in Däne, activities have the same completion interpretation as accomplishments. She says that "it would certainly be undesirable to assume that a viewpoint aspect contributes situation aspectual meaning" (Wilhelm 2007:51). Following Klein (1994) and Parsons (1990), Wilhelm (2007) proposes that the Däne perfective focuses not only on the entire situation time, but also on the "posttime" of the situation. She does not define what "posttime" is in detail, but provide (42), from where we understand it as the time after the change of the state. (41) is used to show the denotation of unmarked perfective. (41) - (42) are from Wilhelm (2007:49).

(41) Unmarked Perfective

.....[TT-{TSit.....}-].....>

(42) Däne Completive Perfective

.....[TT-{TSit.....}-]++++++>
posttime

According to Wilhelm (2007), at a "posttime" of TSit (Situation time), the situation has already come to an end. Since perfective includes a "posttime", every TT (Topic time) contains a change of state, namely from ϕ (as denoted by the lexical verb, and true in TSit), to $\neg\phi$ (true through the "posttime", and part of the denotation of the perfective verb) (Wilhelm 2007:52-53). Her evidence comes from the morphology and semantics of positional statives (*sit*, *lie*, etc.). She observes that these verbs inflect for imperfective and perfective: *the* is for imperfective and *ghe* is for perfective. The stem may also change. She points out that these positional statives with imperfective meaning are morphologically perfective and denote the result state of completed action or event (Wilhelm 2007:52). Wilhelm (2007) illustrates her proposal with (43) - (44). (43a) is the stative use of the verb in the imperfective and (43b) is the non-stative use of the verb in the perfective (from Wilhelm 2007:52-53).

- (43) nonstative
- a. Nesd á
 Ne-Ø-1s-cl-stem:sg sit
 'I am sitting down (in the process)' IMPF
- b. Nida
 ne-(the-)i - Ø- da
 th-CM-1s- cl- stem:sg sit
 'I sat down.' PERF
- (44) stative
- a. thida
 the-i- Ø-da
 CM-1s-cl-stem:sg sit
 'I am sitting (I sat down and am now sitting)' IMPF
- b. Ghid á
 ghe-i - Ø- d á
 CM-1s-cl-stem:sg sit
 'I sat/was sitting (now I don't anymore)' PERF

According to Wilhelm, the imperfective stative form in (44a) has the same stem and the same Conjugation Marker (CM) (although invisible here) as the perfective non-stative form in (43b); thus it is morphologically a perfective (Wilhelm 2007: 53). In (44a) the meaning of the imperfective stative phrase, whose paraphrase is: *I sat down and am now sitting* indicates that the verb denotes the result, or "posttime", of a sitting down event, it is like the meaning in (43b).

Having introduced the "posttime" approach, in which the perfective marker does not only indicate the completion of the action, but also the result state, let us return to our observations and see whether we can make use of this "posttime" approach. At first sight, this analysis would seem to allow us to account for the use of *ta*²¹ in result states and *holding*, *posture*, and *wearing* verbs. For example, we can argue that verbs like *tso*²¹ 'sit', *tsan*⁴⁵ 'stand', *la*¹³ 'hold', and *pei*³³ 'carry' share the property that they produce a result state after

the actions have been completed. Therefore, the stative reading of *ta*²¹ can be seen as part of the denotation of the perfective.

From the examples in (43) - (44), we can see that the case of Dǎn seems like that of Chángshā, in that the perfective realized on certain verbs indicates not only the completion of the action, but also the continuation of the result state. Superficially, it seems that we can treat *ta*²¹ as a marked perfective indicating the "posttime" as is proposed in Wilhelm (2007). However, I have at least four arguments against this "posttime" approach. First, if we assume the "posttime" analysis, we would expect the "posttime" reading of *ta*²¹ to appear not only in verbs such as *tso*²¹ 'sit' and *tsan*⁴⁵ 'stand', but also with other predicates. This is not, however, the case. We saw that in Chángshā, *ta*²¹ normally produces a termination reading with activity verbs, and a completion reading with accomplishment verbs. We have seen some examples above. Some of them are again presented in (45).

- (45) a. t^ha³³ uan¹³ ta²¹ tian⁴⁵ iou¹³.
 3SG play TA electric game
 'He played electric game.'
 b. t^ha³³ k^han⁴⁵ ta²¹ i²⁴ pu²¹ tian⁴⁵ in⁴¹.
 3SG swim_v TA one CL film
 'He saw a movie.'

*ta*²¹ in (45a) can only be interpreted as a termination marker. No completion reading is available, let alone a "posttime" reading. In (45b), it means completion, as indicated.

A second argument relates to the observation that *ta*²¹ is compatible with action verbs in the progressive, where it does not produce a result state. This can be seen in (46).

- (46) a. t^ha³³ i²⁴tsi²⁴ uan¹³ ta²¹ iou¹³xi⁴¹.
 3SG continuously play TA game
 'He is playing games continuously.'

b. $\eta o^{41} m\acute{a}n^{13}$ ta^{41} ta^{21} $ma^{13} t\check{c}ian^{45}$ $tsai^{21} ko^{24}$.
 1PL play TA mahjong TSAIKO
 'We are playing mahjong.'

In (46a) - (46b), ta^{21} can only be interpreted as a progressive marker. This makes it difficult to relate the interpretation of ta^{21} to the completion of an action; it is even less possible to indicate "posttime": the result state of the completion of the action.

Thirdly, we have seen that in activities, ta^{21} can always be used if the sentence appears in the progressive.

(47) $\eta o^{41} m\acute{a}n^{13}$ $tsai^{21} ko^{24}$ ta^{41} ta^{21} $ma^{13} t\check{c}ian^{45}$.
 1PL PROG play TA mahjong
 'We are playing mahjong.'
 Not: 'We played mahjong.'

In (47), ta^{21} is combined with the progressive marker, preverbal $tsai^{21} ko^{24}$. Perfective and progressive are two aspects with contrasting meanings. If it was a perfective marker of the sort in (44a), the combination of the progressive marker $tsai^{21} ko^{24}$ with ta^{21} should not be allowed. The combination in (47) shows that ta^{21} cannot be a perfective marker in the sentence.

2.4.4 Summary

Above, I first pointed out that relating the ambiguity of ta^{21} to the verb feature "dynamicity" is not satisfactory, since sentences with ta^{21} and a non-stative predicate are ambiguous between a perfective and progressive reading. Apparently, the "dynamicity" feature is not the decisive factor for distinguishing between the various interpretations of ta^{21} . I then pointed out that it is not sensible to treat ta^{21} as a "transition" marker, nor a marked perfective marker indicating not only the endpoint but also the time after the completion of the action. In what follows, I provide a new analysis to account for the use of ta^{21} . I start out from arguing for the existence of two particles: ta^{21}_{PERF} and ta^{21}_{PROG} , then I provide an analysis to distinguish the two.

2.5 ta^{21}_{PERF} and ta^{21}_{PROG}

In this section, I will show that ta^{21} should not be treated exclusively as a perfective particle; instead, I argue that there are two ta^{21} s in Chángshā: a perfective marker and a progressive marker. Before I present my analysis, I first point out that ta^{21} is not used as a durative marker. The imperfective reading of ta^{21} in *placement*, *holding*, *posture* and *wearing* verbs is derived from the use of ta^{21} as a perfective marker.

I have two reasons to argue for this view. First, I observe that the meaning of the sentences is very closely related to the perfective: it is the continuing existence of the result state; it is somewhat like the "posttime" as mentioned above. Some relevant examples are repeated here.

- (48) a. tso²⁴ tsi shan²¹ fan⁴¹ ta²¹ i²⁴ pən⁴¹ xy³³.
 desk on put TA one CL book
 'A book was put on the desk.'
- b. tsan³³ san³³ tia¹³ ta²¹ i²⁴ ko⁴¹ lan²⁴ tsi.
 lift TA one CL basket
 'Tsansan lifted a basket.'

In the earlier literature, the ta^{21} in (48) is interpreted as an imperfective marker indicating the result state of the actions. However, ta^{21} in these sentences is better treated as a perfective marker, and the result state reading is derived from the perfective: the action is completed, and the result state continues. This reading only happens with certain verbs like *placement*, *holding*, *posture*, *wearing* etc. These verbs are different from *do*, *wash*, *watch* etc. These latter verbs are simple activities, while verbs like *lift* and *put on* are more like accomplishment verbs in the sense that they have a natural endpoint: once you have put something on, you are wearing it, once you have lifted something, you are carrying it, once you have taken something, you are holding it. So in (48), the result state meaning does not come from the perfective alone: it is the result of a combination of the perfective and this particular type of verb: after the completion of the action, the result state stays. This result state reading does not happen with activity verbs like *do*, *watch*, *wash*, etc. Secondly, as we have

seen in the very beginning of the chapter, in the cases (specifically, *holding*, *wearing* verbs etc.) where ta^{21} is interpreted as an imperfective marker, *le* in Mandarin can also be used this way. There is no difference in the interpretation of the sentences.

- (49) a. zhuōzi shàng fàng zhe/le yī běn shū. (*Mandarin*)
 desk on put IMP/PERF one CL book
 'A book was lying put on the desk.'
- b. tsānsān t í zhe/le yī gè lǎnzi.
 lift IMP/PERF one CL basket
 'Tsansan was carrying a basket.'

So from now on, I leave ta^{21} indicating continuation of the result states out of the discussion. I will only be concerned with distinguishing the perfective ta^{21} (ta^{21}_{PERF}), indicating the completion/termination of actions, from the imperfective ta^{21} (ta^{21}_{PROG}), indicating the ongoingness of actions.

The main arguments for the postulation of two ta^{21} s are based on three observations: the use of ta^{21} with predicates modified by certain adverbs; the use of ta^{21} with negation; and its use in sentences with preverbal and sentence final *tsai*²¹*ko*²⁴. We have seen most of the material above. Here we put it together in one place.

2.5.1 ta^{21} with negation

We have seen in section 2.2.2.1 that ta^{21} can be used in negative sentences, but only in sentences with the progressive reading.

- (50) a. t^ha³³ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹.
 3SG watch TA TV
 'He watched TV.'
- b. t^ha³³ mau²¹ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹.
 3SG NEG watch TA TV
 'He is not watching TV.'
 NOT: 'He did not watch TV.'

- c. t^ha³³ mau²¹ k^han⁴⁵ tiən⁴⁵si⁴¹.
 3SG NEG watch TV
 'He did not watch TV.'

*ta*²¹ in (50a) is used as a perfective marker, and the action is understood as having been completed. In (50b), where the negative marker *mau*²¹ is used, *ta*²¹ can still appear, in which case, however, *ta*²¹ cannot be interpreted as a perfective marker, but only as a progressive marker. In (50c), the negative marker *mau*²¹ is used without *ta*²¹, and the sentence only has completion reading.

Chángshā *mau*²¹ is similar to Mandarin *mǎi* (yǒu) 'not have', in which *yǒu* 'have' is the marker of the perfective, the counterpart of *le* in negative sentences (Wang 1965). *yǒu* is often omitted, just leaving *mǎi* 'not', but the association with *yǒu* remains, so *mǎi* then means 'not have'. In Mandarin *mǎi* (yǒu) 'not have' cannot co-occur with the perfective marker *le* because both *yǒu* 'have' and *le* are both perfective markers. For example, the counterpart of (50) in Mandarin is (51).

- (51) a. tā kàn le diànshì
 3SG watch PERF TV
 'He watched TV.'
- b. * tā méi (yǒu) kàn le diànshì.
 3SG NEG have watch PERF TV
 Intended: 'He did not watch TV.'
- c. tā méi (yǒu) kàn diànshì
 3SG NEG have watch TV
 'He did not watch TV.'

So *le* and its negative counterpart *mǎi* (yǒu) cannot co-occur. The same can be said of the counterparts of *le* and *mǎi* (yǒu) 'not have' in Chángshā, *ta*²¹_{PERF} and *mau*²¹ respectively: perfective *ta*²¹ and negative perfective *mau*²¹ cannot co-occur, as is clear from (50), which corresponds to the Mandarin situation in (51). This leads to the conclusion that the *ta*²¹ we do find with *mau*²¹ cannot be perfective *ta*²¹. It must be another marker and, as we noted above, the meaning of these sentences suggests that it is a marker of the progressive.

2.5.2 *ta*²¹ with adverbial modifiers

As shown in section 2.2.2.2, with an activity verb modified by a manner adverb, *ta*²¹ can be interpreted as a progressive marker and it also can be interpreted as a perfective marker. This is once again illustrated in (52) - (53).

- (52) a. t^ha³³ k^han⁴¹ ta²¹ tiən⁴⁵ si⁴¹.
 3SG watch TA TV
 'He watched TV.'
 NOT: 'He is watching TV.'
- b. t^ha³³ zən²¹ zən²¹ tsən³³ tsən³³ ti k^han⁴¹ ta²¹ tiən⁴⁵ si⁴¹.
 3SG attentively watch TA TV
 'He watched TV attentively.'
 'He is watching TV attentively.'
- (53) a. tsan³³ san³³ ɕi³³ ta²¹ i³³ fu.
 wash TA clothes
 'Tsansan washed his clothes.'
- b. tsan³³ san³³ xə⁴¹ pu⁴¹ tɕin¹³ iuan²¹ ti ɕi³³ ta²¹ i³³ fu.
 very NEG willingly wash TA clothes
 'Tsansan washed his clothes very unwillingly.'
 'Tsansan is washing his clothes very unwillingly.'

In (52a), *ta*²¹ can only have one interpretation; while in (52b), in which the sentence is modified by the manner adverb *zən*²¹ *zən*²¹ *tsən*³³ *tsən*³³ *ti* 'attentively', both the progressive and the completion reading of *ta*²¹ are available (52b). The same is true in (53b), where the adverb *pu*⁴¹ *tɕin*¹³ *iuan*²¹ *ti* 'unwillingly' is used and the sentence has two readings. In (53a), where there is no adverb, the sentence has only one reading. The observation that *ta*²¹ is ambiguous can also be made in the sentences modified by locative or instrumental adverbs. This can be seen in (54) - (55).

- (54) t^ha³³ mən tsai²¹ la⁴⁵li tɕi⁴¹ ta²¹ fan¹³tsi.
 3PL LOC there build TA house
 'They built houses there (the houses have been built).'
 'They are building houses (in the process of building houses).'

- (55) t^ha³³ in²¹ tsuo⁴¹sou⁴¹ ɕiə⁴¹ ta²¹ tsi²¹.
 3SG use left hand write TA character
 'He wrote characters with his left hand.'
 'He was writing with his left hand.'

In (54) - (55), a locative phrase or instrumental adverb is used, and *ta*²¹ can have either of the two readings.

2.5.3 *ta*²¹ with pre-verbal and sentence final *tsai*²¹*ko*²⁴

Our third observation has to do with the use of *ta*²¹ with preverbal and sentence final *tsai*²¹*ko*²⁴. In section 2.2.2.3, we pointed out that preverbal *tsai*²¹*ko*²⁴ is a progressive marker in Chángshā. We saw that *ta*²¹ can be used with preverbal *tsai*²¹*ko*²⁴, in which case the sentence produces a progressive reading. If *ta*²¹ is a perfective marker, it is hard to explain the combination with the preverbal progressive marker *tsai*²¹*ko*²⁴.

Furthermore, to treat *ta*²¹ exclusively as a perfective marker is also questionable if we consider the use of *ta*²¹ in activities modified with sentence final *tsai*²¹*ko*²⁴. We know that when sentence final *tsai*²¹*ko*²⁴ is used in sentences containing an activity verb and *ta*²¹, the action can only be interpreted as ongoing, which is not the case for sentences with an achievement. Though it is not clear yet whether the progressive reading comes from *ta*²¹ or *tsai*²¹*ko*²⁴ (we will get to that below), for the following examples we first point out that it is not sensible to treat *ta*²¹ as a perfective.

- (56) a. t^ha³³ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹ tsai²¹ko²⁴.
 3SG watch TA TV TSAIKO
 'He is watching TV.'
 NOT: 'He watched TV.'

- b. $t^h a^{33}$ $t\check{c}i^{41}$ ta^{21} i^{24} $t\acute{a}n^{45}$ $f\acute{a}n^{13}tsi^{41}$ ($tsai^{21}ko^{24}$)
 3SG build TA one CL house TSAIKO
 'He has built a house.'

The action in (56a) can only be interpreted as ongoing, while in (56b) it can only be interpreted as having been completed. Both sentences have ta^{21} and $tsai^{21}ko^{24}$, but in (56b) $tsai^{21}ko^{24}$ is not obligatory. Apparently, in (56b), the presence or absence of $tsai^{21}ko^{24}$ makes no difference for the interpretation of the sentence; it does not seem to contribute any meaning at all (but see below). In (56a), its presence or absence does make a difference: only with $tsai^{21}ko^{24}$ present do we get the progressive reading. However, we cannot conclude from this that the progressive reading comes from $tsai^{21}ko^{24}$, since in order to get the progressive reading, ta^{21} is also obligatory, so the progressive reading might as well come from ta^{21} . In other words, sentences with $tsai^{21}ko^{24}$ do not lead to the conclusion that ta^{21} is always a perfective marker and indeed may lead to the conclusion that it sometimes is not, and that in those cases it is a progressive marker. In section 2.6.2, we will argue that the sentence final $tsai^{21}ko^{24}$ is not a marker of the progressive. There are cases in which $tsai^{21}ko^{24}$ is used without producing a progressive reading. This can already be seen in (56b) above: in an accomplishment event, $tsai^{21}ko^{24}$ is optional, and the sentence produces a completion reading.

In view of the above, I conclude that it is better not to treat ta^{21} exclusively as a perfective marker. Instead, I propose that there are two markers that share the same form: ta^{21}_{PERF} , a perfective marker, and ta^{21}_{PROG} , a progressive marker.

In taking this "two ta^{21} s" approach, I am left with two questions to answer:

- 1) How can we tell the two particles apart?
- 2) We have seen that when ta^{21} is used as a progressive marker, the sentence always needs some extra elements (e.g. preverbal or sentence final $tsai^{21}ko^{24}$, negation, or adverbial modification), while this is not the case for the use of ta^{21} as a perfective marker. The question is: What properties do these contexts share, which enable them to license ta^{21} to be used as a progressive marker (because that is what they seem to do)?

To answer these questions, I would like to start with the use of ta^{21} with sentence final particle $tsai^{21}ko^{24}$. Since we have seen above that a sentence modified by sentence final $tsai^{21}ko^{24}$ can get a progressive reading and that on the face of it, it is not clear where the reading of ongoingness comes from, it is possible that $tsai^{21}ko^{24}$ produces the reading of ongoingness, in which case we need to determine what ta^{21} is used for. Alternatively, ta^{21} is the progressive marker, we need to see what the function of $tsai^{21}ko^{24}$ is.

In what follows I first argue against the two traditional views on the use of sentence final $tsai^{21}ko^{24}$, one of which treats it as a sentence final mood particle, while the other takes it as a progressive marker, the same marker as the preverbal $tsai^{21}ko^{24}$. I subsequently provide an analysis of the semantic interpretation of sentence final $tsai^{21}ko^{24}$.

2.5.4 Summary

In this section, I have argued for the claim that there exist two particles, ta^{21}_{PERF} and ta^{21}_{PROG} . I first showed that in sentences modified by some manner adverbs, two interpretations are available, while in sentences modified by the preverbal progressive marker and negative adverbs, ta^{21} can only be interpreted as progressive. Our analysis has shown that whenever ta^{21}_{PROG} is used, it always needs some other elements to accompany it. In the analysis presented below, we are going to show that these 'other elements' share something that makes it possible for ta^{21}_{PROG} to be used.

2.6 Interpreting sentence final $tsai^{21}ko^{24}$

2.6.1 Is sentence final $tsai^{21}ko^{24}$ a mood particle?

Mandarin, just like most other varieties of Chinese, has a number of discourse-oriented particles appearing at the end of a sentence to express the speaker's mood, attitude and emotion. They are referred to as mood particles, and treated as heads of functional projections in the CP domain (Li 2006).

Following Li (2006), in the present thesis, I assume that there is a functional projection, MoodP, expressing the illocutionary force in C. For instance, sentence final particle *ne* in Mandarin, as well as its cognate *le* in Chángshā, indicates an affirmative mood; they are supposed to head a C-projection.

In the traditional analysis, the sentence final *tsai*²¹*ko*²⁴ in Chángshā is sometimes treated as a sentence final particle, used to express the affirmative force of the sentence (Qú2007). Pointing at sentences like (57) - (58) (from Qú 2007:53), Qú observes that *tsai*²¹*ko*²⁴ is optional: it can be omitted without consequences for the grammaticality of the sentence.

- (57) mən²⁴ k^hai³³ ta²¹ (tsai²¹ko²⁴).
 door open TA TSAIKO
 'The door has been opened.'

- (58) tɕ^hian¹³shan²¹ kua⁵⁴ ta²¹ xua²¹ (tsai²¹ko²⁴).
 wall on hang TA picture TSAIKO
 'There are pictures hanging on the wall.'

Qú (1997) suggests that it is only used for the purpose of emphasis, and that, as such, it can be treated as a mood particle.

The idea that sentence final *tsai*²¹*ko*²⁴ (or *tsai*²¹, the variety of *tsai*²¹*ko*²⁴*li* 'here', in other dialects) is treated as a mood particle is not new in the literature on dialects. For example, Wú (1998) holds that in the Wǔhàn dialect, sentence final *tsai*²¹ expresses an affirmative force. Xiāng (2000) treats sentence final *tsai*²¹ in the Yīngshān dialect in the same way.

However, I do not think that *tsai*²¹*ko*²⁴ in Chángshā functions as an affirmative mood marker. (57) - (58) cover only part of the usage of *tsai*²¹*ko*²⁴. In fact, as we have seen, for an action to be represented as ongoing, *tsai*²¹*ko*²⁴ is obligatory. (56a) is repeated as (59).

- (59) a. t^ha³³ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹ tsai²¹ko²⁴.
 3SG watch TA TV TSAIKO
 'He is watching TV.'

- b. t^ha³³ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹.
 3SG watch TA TV
 NOT: 'He is watching TV.'
 'He watched TV.'

In (59), *tsai*²¹*ko*²⁴ can be left out; however, if it is left out, the progressive reading of the sentence becomes unavailable: compare (59a) with (59b). The minimal pair in (59) shows that *tsai*²¹*ko*²⁴ plays a role in whether a sentence that also contains *ta*²¹ can have a progressive meaning. Given the established analysis of mood particles, in which a mood particle can be deleted without affecting the grammaticality of the sentence, it does not seem to be sensible to treat sentence final *tsai*²¹*ko*²⁴ as a mood particle.

2.6.2 Sentence final *tsai*²¹*ko*²⁴ ≠ preverbal *tsai*²¹*ko*²⁴

Traditionally, linguists often argued that both pre-verbal and sentence final *tsai*²¹*ko*²⁴ are progressive markers (Hè 1997). The main reason is that with both particles a sentence can have a reading of the progressive (Hè 1997). (55a) - (55b) are repeated in (60a) - (60b), in (60c) the preverbal *tsai*²¹*ko*²⁴ is given.

- (60) a. t^ha³³ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹ tsai²¹ko²⁴.
 3SG watch TA TV TSAIKO
 'He is watching TV.'
 b. t^ha³³ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹.
 3SG watch TA TV
 'He watched TV.'
 c. t^ha³³ tsai²¹ko²⁴ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹.
 3SG TSAIKO watch TA TV
 'He is watching TV.'

In (60b), *ta*²¹ is used as a perfective marker, in (60a), where sentence final *tsai*²¹*ko*²⁴ is added, the action described is interpreted as ongoing, in (60c), the sentence is presented in the progressive aspect by preverbal *tsai*²¹*ko*²⁴. So the question arising from these sentences is: Where does the progressive reading in

(60a) come from? We might argue that the ongoingness reading comes from sentence final *tsai*²¹*ko*²⁴, since what distinguishes (60a) from (60b) is the fact that sentence final *tsai*²⁴*ko*²¹ is added to the former, with the meaning change as a consequence. If sentence final *tsai*²¹*ko*²⁴ expresses the ongoingness of the action, we can argue that *tsai*²¹*ko*²⁴ has turned the sentence into a progressive. In that case, we can say that both the preverbal and sentence final *tsai*²¹*ko*²⁴ are used as a progressive marker (Hè 1997). However, this hypothesis quickly turns out to be untenable. I have at least five arguments for not treating sentence final *tsai*²¹*ko*²⁴ in the same way as preverbal *tsai*²¹*ko*²⁴. The first consideration is that there are predicates, mostly certain types of stative predicates, that are compatible with sentence final, but not with preverbal, *tsai*²¹*ko*²⁴, as is exemplified in (61).

- (61) a. ηo^{41} lau^{41} ko^{24} $\text{t}^{\text{h}}\text{ən}^{45}$ ta^{21} $\text{tsai}^{21}\text{ko}^{24}$.
 1SG head ache TA TSAIKO
 'I am having a headache.'
 b. $*\eta\text{o}^{41}$ $\text{tsai}^{21}\text{ko}^{24}$ $\text{lau}^{41}\text{k}^{\text{h}}\text{o}^{24}$ $\text{t}^{\text{h}}\text{ən}^{45}$ ta^{21} .
 1SG PROG head ache TA
 c. $*\eta\text{o}^{41}$ $\text{tsai}^{21}\text{ko}^{24}$ $\text{lau}^{41}\text{k}^{\text{h}}\text{o}^{24}$ $\text{t}^{\text{h}}\text{ən}^{45}$.
 1SG TSAIKO head ache

In principle, there are two possible explanations. One is to assume that they are both progressive markers and that differences between them are related to their different positions. The other is that they are not the same elements, for instance, that, unlike preverbal *tsai*²¹*ko*²⁴, sentence final *tsai*²¹*ko*²⁴ is not a progressive marker. This could explain (61), in which the real progressive marker, preverbal *tsai*²¹*ko*²⁴, is not allowed in front of the stative predicate; after all, despite the translation, states generally do not co-occur with the progressive.

Secondly, that the two *tsai*²¹*ko*²⁴s are different is also clear from the fact that sentence final *tsai*²¹*ko*²⁴ can co-occur with preverbal locative phrases, while this does not apply to preverbal *tsai*²¹*ko*²⁴. Note that for Mandarin, it is widely assumed that the progressive marker *zài* has developed from a locative preposition (Shi 2006:15). So the default reading of a sentence with a preverbal

locative phrase without any aspectual particles is progressive. The same is true for Chángshā, explaining why the action in (62a) with the locative phrase *tsai*²¹ *tɕia*³³ *li* 'at home' is interpreted as ongoing.

- (62) a. t^ha³³ tsai²¹ tɕia³³ li k^han⁴⁵ tiən⁴⁵ si⁴¹.
 3SG LOC home in watch TV
 'He is watching TV at home.'
- b. t^ha³³ tsai²¹ tɕia³³ li kan⁴⁵ ta²¹ tiən⁴⁵ si⁴¹ tsai²¹ ko²⁴.
 3SG LOC home in watch TA TV TSAIKO
 'He is watching TV at home.'
- c. *t^ha³³ tsai²¹ {tsai²¹ ko²⁴} tɕia³³ li {tsai²¹ ko²⁴}
 3SG LOC TSAIKO home in TSAIKO
 kan⁴⁵ tiən⁴⁵ si⁴¹.
 watch TV

The locative phrase *tsai*²¹ *tɕia*³³ *li* 'at home' is used in (62a) not only to provide spatial information for the event but also to indicate that the action is ongoing. Sentence final *tsai*²¹ *ko*²⁴ is compatible with such locative, as is clear from (62b). There is not much difference in interpretation between (62a) and (62b), except for the fact that in (62b), there is more emphasis on the state of the ongoingness of the action. By contrast, preverbal *tsai*²¹ *ko*²⁴ (62c) cannot co-occur with a preverbal locative phrase *tsai*²¹ *tɕia*³³ *li* 'at home'. This might be because the preverbal locative phrase '*tsai*²¹ *tɕia*³³ *li* 'at home' and preverbal progressive marker *tsai*²¹ *ko*²⁴ would occupy the same position. It is also possible that they are incompatible because they both express the same notion: the progressive. If the latter is the right reason, sentence final *tsai*²¹ *ko*²⁴ should perhaps not be treated as a progressive marker.

Thirdly, as I pointed out above, the preverbal *tsai*²¹ *ko*²⁴ can present an action as ongoing on its own, while this is not the case for sentence final *tsai*²¹ *ko*²⁴. This alone can be seen as an important fact if one wants to determine the status of sentence final *tsai*²¹ *ko*²⁴. See (63).

- The verbs in (65) are accomplishments, and *ta*²¹ can only be interpreted as a perfective marker. Note that *tsai*²¹*ko*²⁴ is optional in this sentence. The point

of these examples is that sentences with *tsai*²¹*ko*²⁴ do not always produce a progressive reading and that, as a consequence, it may not be correct to take it as a progressive marker and as the same as preverbal *tsai*²¹*ko*²⁴.

The above discussion shows that *tsai*²¹*ko*²⁴ is not a mood particle, nor can it be treated as a progressive marker. There are not only distributional but also interpretational differences between sentence final *tsai*²¹*ko*²⁴ and preverbal *tsai*²¹*ko*²⁴. Having established this, I put forth the hypothesis that the reading of ongoingness of the sentence modified by sentence final *tsai*²¹*ko*²⁴ comes from *ta*²¹. Then the immediate question is: What is *tsai*²¹*ko*²⁴ used for? Put differently, what is the relation between the use of *ta*²¹ and sentence final *tsai*²¹*ko*²⁴? Before we provide an answer to this question, I will first provide an analysis of the semantic interpretation of sentence final *tsai*²¹*ko*²⁴. I am going to propose that the reading of sentence final *tsai*²¹*ko*²⁴ is relevant to the reading of present tense.

2.6.3 Sentence final *tsai*²¹*ko*²⁴: a reading of present tense

In this section, I propose that *tsai*²¹*ko*²⁴ contributes temporal location to the sentence. More specifically, sentence final *tsai*²¹*ko*²⁴ is used to indicate that the situation time of a sentence overlaps with speech time.

First, the use of *tsai*²¹*ko*²⁴ with placement verbs can help us to argue for the idea that its main function is to locate the situation in the present tense, as in (66).

- (66) a. tɕʰian¹³ san²¹ kua⁴⁵ ta²¹ fa²¹.
 wall on hang TA picture
 'There are some pictures on the wall.'
 b. tɕʰian¹³ san²¹ kua⁵⁴ ta²¹ fa²¹ tsai²¹ko²⁴.
 wall on hang TA picture TSAIKO
 'Some pictures are on the wall (as you can see now).'

Sentence final *tsai*²¹*ko*²⁴ is optional in (66), and *ta*²¹ can therefore be interpreted as a perfective marker indicating that the action has been completed, the reading of the duration of the result state from the action is derived from the

action: after you hang a picture on the wall, it is hanging there (see the beginning of 2.5 above). In (66b), *tsai*²¹*ko*²⁴ is used, and the speaker places more emphasis on the present state of the picture on the wall. We can imagine a situation to distinguish between the two sentences: for example, Tsansan asks Lisi to hang a picture on the wall, and if there is already a picture on the wall, Lisi would say (66b) rather than (66a). In this way, Lisi is saying that there is a picture on the wall, “as we speak”. So in fact by uttering this sentence, Lisi intends to relate the event time, the time when the picture is on the wall to the speech time. (66a), on the other hand, does not have such an actuality implication.

Observe that sentence final *tsai*²¹*ko*²⁴ is not compatible with temporal phrases indicating a future event and a past event.

- (67) a. *t^ha³³ kan³³ ts^hai¹³ k^han⁴⁵ ta²¹ tiən⁴⁵si⁴¹ tsai²¹ko²⁴.
 3SG just now watch TA TV TSAIKO
 Intended: 'He was watching TV just now.'
- b. *min¹³ tian³³ ko²¹ko⁴¹si¹³ xou²¹, t^ha³³ k^han⁴⁵ ta²¹
 tomorrow this time 3SG watch TA
 tiən⁴⁵si⁴¹ tsai²¹ko²⁴.
 TV TSAIKO
 'At this time tomorrow, he will be watching TV.'

The above shows that sentence final *tsai*²¹*ko*²⁴ is used to help locate an event in time, and the sentence modified with sentence final *tsai*²¹*ko*²⁴ can only obtain a present tense reading.

Sybesma (2004, 2007) suggests that Mandarin and Cantonese languages do have tense, but do not express it using verbal suffixes. He observes that Cantonese sentence final particle *lei*⁴ is used to express past events, while *ge*³ takes care of the non-past. He proposes that *lei*⁴ and *ge*³ are possible instantiations of a tense operator in the C-domain of a Cantonese sentence (possibly FinP), which set the value of the head of the TP to plus or minus past ([−/+PAST]). (68) - (69) are from Sybesma (2004).

- (68) a. go²-di¹-syu¹, aa³-ji⁶-suk¹ wui⁵ luk⁶ zuk⁶ gei³ faan³
 that CL book, 2SG uncle will continue send- back
 lei⁴ (ge³).
 come GE
 Without GE: 'as to those books, Second Uncle will continue to
 send them to us.'
 With GE: 'as to those books, Second Uncle will continue to send
 them to us-for sure, don't worry about it.'
- b. keoi⁵ sik¹ Dak¹man² (ge³)
 3SG know German GE
 Without GE: 'S/he knows German.'
 With GE: 'don't worry, s/he knows German.'
- (69) keoi⁵ hai² Rotterdam zyu⁶ (lei⁴)
 3SG at Rotterdam live LEI
 Without lei⁴: 'S/he lives in Rotterdam.'
 With lei⁴: 'S/he used to live in Rotterdam.'

In (68), sentence final *ge*³ is optional, but without *ge*, the sentences present a general statement, a general truth, while with *ge*³ the statement is relevant to the current moment. In (69), we see very clearly the effect of adding *lei*⁴: without it, the sentence reads as a present tense, with it, it has become a statement about a situation in the past. According to Sybesma (2004), the sentence final elements *ge*³ and *lei*⁴ occupy C-head positions, from which they influence the setting of the head of TP. I assume that the same happens in Chángshā. Specifically, I point out that the sentence final *tsai*²⁴*ko*²⁴ is a tense element in the C-domain and functions like *ge*³ in Cantonese: binding a variable in T, setting the value of T as present.

To further support the analysis of sentence final *tsai*²¹*ko*²⁴ as a present tense operator, I provide an analysis for another sentence final particle in Chángshā: *k^hə⁴⁵lai*¹³.

*k^hə⁴⁵lai*¹³ can only appear at the end of a sentence. It is traditionally treated as an experiential aspect (Zhōu 1998) or anterior (Perfect) aspect marker (Wǔ 1999). Zhōu claims, "*k^hə⁴⁵lai*¹³" signifies a temporal gap between the time of

the action/activity and the time of utterance or time specified in the context.”

(70a) - (70b) are from Zhou (1998:11).

- (70) a. tsan³³san³³ k^han⁴⁵ ko²⁴ pən⁴¹ xu³³ k^hə⁴⁵lai¹³.
 read this CL book KHELAI
 'Tsansan was reading this book.'
 b. tsan³³san³³ kə⁴⁵ ɕio²⁴xiao⁴⁵ k^hə⁴⁵lai¹³.
 go school KHELAI
 'Tsansan went to school.'

(70) can be used to answer a question like: "Where was Tsansan?" By saying (70), the speaker says that Tsansan was reading the book or had gone to school, implying that why the speaker did not see him.

Different from Zhōu, Wǔ (1999) treats *k^hə⁴⁵lai¹³* as a Perfect aspect marker, indicating that the action has finished in the past but is still connected to the utterance time. Wǔ (1999) uses Anterior to replace Perfect, and defines the anterior aspect marker as an element that "... signals that the situation has occurred prior to the reference time and is relevant to the situation at another time" (Wǔ 1999:8). (71) is from Wǔ (1999:79).

- (71) a. xao⁴¹ tsiəu⁴¹ mau²¹ k^han⁴⁵tau⁴⁵ li⁴¹ ta²¹, li⁴¹ k^hə⁴⁵ la⁴¹li
 long time NEG see 2SG Mod 2SG go where
 k^hə⁴⁵lai³³ la?
 KHELAI QM
 'I have not seen you for a long time. Where did you go?'
 b. ŋo⁴¹ k^hə⁴⁵ Shan²¹hai⁴¹ k^hə⁴⁵lai¹³.
 1SG go Shanghai KHELAI
 'I went to Shanghai.'

I suggest that *k^hə⁴⁵lai¹³* should not be treated as anterior or experiential aspect, but rather as a tense operator. Its main function is to place the situation time of the sentence before the speech time as a [+PAST] counterpart to *tsai*²¹*ko*²⁴, comparable to Cantonese *lei*⁴.

My first argument comes from the observation that $k^h\partial^{45}lai^{13}$ has nothing to do with the present situation; it just indicates a past event, as is clear from the interpretation in (72a). To better see that $k^h\partial^{45}lai^{13}$ is used to locate the sentence in time, we compare $k^h\partial^{45}lai^{13}$ with ta^{21} in its perfective use (72a) - (72b).

- (72) a. $tsan^{33}san^{33} lai^{13} k^h\partial^{45}lai^{13}$.
 come KHELAI
 'Tsansan was here (now he has left).'
- b. $tsan^{33}san^{33} lai^{13} ta^{21}$.
 come TA
 'Tsansan has come (he is here).'

In (72a), $k^h\partial^{45}lai^{13}$ is used, and the sentence means that Tsansan was here, but he has now left; on the other hand, (72b), with ta^{21} , means that Tsansan has come and he is still here now. The comparison shows that $k^h\partial^{45}lai^{13}$ has nothing to do with the present tense. That $k^h\partial^{45}lai^{13}$ is relevant to the past event reading also can be seen in (73).

- (73) a. $tsan^{33}san^{33} pin^{21} k^h\partial^{45}lai^{33}$.
 ill KHELAI
 'Tsansan was ill.'
- b. $tsan^{33}san^{33} pin^{21} ka^{41} ta^{21}$.
 ill KA TA
 'Tsansan has fallen ill.'

(73a) means that Tsansan was ill, but has now recovered, while (73b), with ta^{21} (and ka^{41} to which we turn in the next chapter), gets a change of a state reading: Tsansan has fallen ill.

My second argument is relevant to the observation that $k\partial^{41}lai^{13}$ focuses on the location of an action on the temporal axis; it does not say much about the presentation of the temporal structure of an event.

- (74) a. *la*⁴⁵ *poŋ*¹³ *tɕiao*⁴¹*tsi* *la*⁴¹*ko*⁵⁴ *tɕia*²⁴ *kʰə*⁴⁵*lai*¹³?
 that CL dumpling who eat KHELAI
 'Who ate from the plate of dumplings?'
 b. *la*⁴⁵ *poŋ*¹³ *tɕiao*⁴¹*tsi* *la*⁴¹*ko*⁵⁴ *tɕia*²⁴ *ka*⁴¹ *ta*²¹?
 that CL dumpling who eat KA TA
 'Who has eaten that plate of dumplings?'

(74a) means that the speaker asks who ate dumplings in the dish. When the sentence is uttered, there are still some dumplings left. In using (74b), there are no dumplings left. The comparison in (74) shows that *kʰə*⁴⁵*lai*¹³ focuses on the action itself: it indicates that there was a certain action, in this case eating dumplings, in the past. *ta*²¹, on the other hand, focuses more on the presentation of the event as a whole, including the endpoint. (75) also illustrates this.

- (75) a. *la*⁴⁵ *tɕiən*²¹ *i*³³*fu* *ŋo*⁴¹ *ɕi*⁴¹ *kʰə*⁴⁵*lai*³³ (*ɕi*⁴¹ *pu*⁴⁵ *kan*³³*tɕin*⁴¹).
 that CL clothes 1SG washKHELAI wash NEG clean
 'I washed (was washing) that piece of clothing (but failed to wash it clean).'
 b. *la*⁴⁵ *tɕiən*²¹ *i*³³*fu* *ɕi*⁴¹ *ka*⁴¹ *ta*²¹ (**ɕi*⁴¹ *pu*⁴⁵ *kan*³³*tɕin*⁴¹).
 that CL clothes wash KA TA, washNEG clean
 '(I) have washed that piece of clothing (*but failed to wash it clean).'

In (75a), *kʰə*⁴⁵*lai*¹³ is used; the speaker means that he did some washing, but no claim is made to the effect that it was successfully concluded; that is why the follow-up sentence denying successful completion can be added. All he is saying is that there was an event of washing and it is located before the time of speech. In (75b), *ta*²¹ is used (with *ka*⁴¹), and the clause stating that I failed to wash the clothes clean is not allowed here. This is due to the fact that *ka*⁴¹ and *ta*²¹ express that the action has been completed and completing an act of washing implies that whatever one was washing will have become clean, while *kʰə*⁴⁵*lai*¹³ only indicates that an action of washing took place at some point before the utterance time. In (75a), the speaker means that he went through the motions of washing, but because there is no question of him completing the act of washing, there is no implication of having washed the clothes clean.

Finally, observe that *k^hə⁴⁵lai¹³* is often used to indicate that someone did something in the recent past time.

- (76) A: *la⁴¹ko⁴⁵tso²¹ ɲo⁴¹ti²¹ i⁴¹tsi k^hə⁴⁵lai¹³?*
 who sit my chair KHELAI
 'Who sat on my chair?'
 B: *ɲo⁴¹ tso²¹ k^hə⁴⁵lai¹³.*
 1SG sit KHELAI
 'I did.'
- (77) A: *li⁴¹ o²⁴kai⁴¹ mau²¹ ɕi⁴¹ i³³fu la⁴¹?*
 2SG why NEG wash clothes QM
 'Why did not you wash the clothes?'
 B: *pu²⁴tə kən⁴⁵ lə, ɲo⁴¹ shan²¹ kai³³ k^hə⁴⁵lai¹³.*
 NEG free SFP, 1SG go street KHELAI
 'I was not free, I was out shopping.'
- (78) A: *a¹³ tsi ku²⁴ tə ko²⁴yan²¹ shan³³xin³³, li⁴¹ mau⁴¹ ta⁴¹*
 child cry SUB so sad 2SG NEG hit
t^ha³³ k^hə⁴⁵lai¹³ pa?
 him KHELAI QM
 'The child is crying so hard, is it because you hit him?'
 B: *ɲo⁴¹ ta⁴¹ t^ha k^hə⁴⁵lai¹³? pu²⁴ ko⁴¹lən¹³ lo³³.*
 1SG hit 3SG KHELAI NEG possible MP
 'I hit him? Impossible.'

In (76) - (78), *k^hə⁴⁵lai¹³* is used to express a past tense, to report about a past event. For example, in (76A), the speaker may find that the chair had been moved a little, or there was some signs showing that someone just sat on his chair. By asking the question, he was in fact verifying whether someone sat on his chair, that is, the sentence focuses on the taking place of a past event (there is obviously no-one sitting in the chair now).

The above facts indicate that *k^hə⁴⁵lai¹³* is better treated as a tense element indicating that the situation is set before the speech time. I assume without

further discussion, but with reference to what we find in Cantonese, that it is located in the CP-domain.

In sum, I argue that sentence final $tsai^{21}ko^{24}$ and $kə^{45}lai^{13}$ are two tense elements in the same way that the Cantonese elements introduced above are tense elements: they occupy a position in the CP domain, from which they determine or "set" the value of the head of TP. The former indicates present tense and the latter indicates past tense. The temporal feature of the two particles can be shown in (79).

- (79) a. $tsai^{21}ko^{24}$ [present]
 b. $kə^{hə^{45}}lai^{13}$ [past]

Now that we have seen that the interpretation of $tsai^{21}ko^{24}$ is relevant to present tense, we turn to the question raised in section 2.6.1: What is the relation between sentence final $tsai^{21}ko^{24}$ and ta^{21} when ta^{21} is used as a progressive marker? In what follows I provide a detailed analysis to show that the use of $tsai^{21}ko^{24}$ functions as one of the mechanisms to license the use of ta^{21} as a progressive marker.

2.6.4 Summary

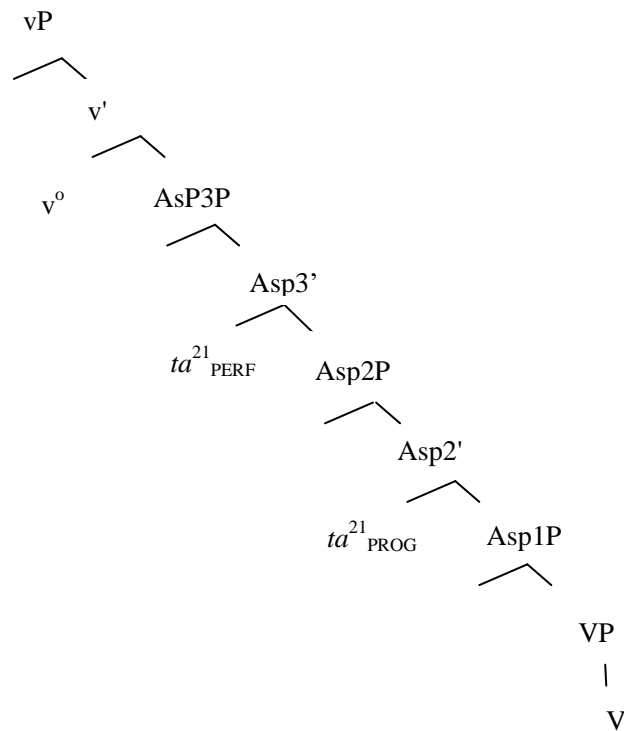
In this section, I provided an analysis to explain the function of sentence final $tsai^{21}ko^{24}$. I argued for the idea that the sentence final $tsai^{21}ko^{24}$ is a tense element indicating that the situation is set before the speech time. It occupies a position in the CP domain, from which it determines or "sets" the value of the head of TP.

2.7 Distinguishing two ta^{21} s

In the above section, I point out that sentence final $tsai^{21}ko^{24}$ is not a progressive marker, but a present tense operator. In this section, I will point out that the interpretation of sentence final $tsai^{21}ko^{24}$ can help me distinguish ta^{21}_{PERF} from ta^{21}_{PROG} . I assume that ta^{21}_{PERF} is located in Asp3^0 , and ta^{21}_{PROG} is

located in $Asp2^0$. The main reason to justify the different positions of these two particles is that, as was introduced above, these two particles have different meanings: ta^{21}_{PERF} is a perfective marker, indicating that an event has been terminated or completed and ta^{21}_{PROG} is a progressive marker, indicating that an event is ongoing. The difference in meaning may be seen as an indication of a difference in position. This corresponds to the general insight that perfective aspect is located higher than progressive aspect, which is what Tsai (2008) applies to Mandarin as well (even if the concrete positions he assigns them to differ from mine). The structural positions I assume for ta^{21}_{PERF} and ta^{21}_{PROG} in the tree introduced in chapter 1 are indicated in (80).

(80)



2.7.1 Event argument licensing, *ta*²¹_{PERF} and *ta*²¹_{PROG}

What we have seen in the previous sections is that in certain sentences, the element *ta*²¹ is a marker of the progressive, as long as it is accompanied by other material such as sentence final *tsai*²¹*ko*²⁴, certain adverbs or negation, and a marker of the perfective without the condition that it be accompanied by such material in these contexts. I would like to propose that this can be explained in terms of tense anchoring, or, really, event argument licensing, developed by Tsai (2008).

2.7.2 Tense anchoring in Mandarin Chinese

Tsai's point of departure is constituted first by sentences like (81a) - (81b) (from Tsai 2008:677) which sound incomplete to native speakers even though they seem complete: the argument structure of the sentence is complete and there is an aspect marker, but it is somehow felt to be not completely right. That is why Tsai says they are "felt to be incomplete".

- (81) a. % Akiū n á le shū.
 take PERF book
 'Akiu took a book(s).'
 b. % Akiu pǎo zhe.
 run IMP
 'Akiu was running.'

His second point of departure is the theoretical point that every event variable must be bound by a tense operator or another type of operator, like a deontic or a negative operator. Tsai claims that the sentences in (81a) - (81b) are incomplete as a result of the failure to get the event variable bound. To get the event variable brought out, several strategies are available. The simplest is using tense. The event variable can be seen as linked to what is called "semantic tense" and the event variable is brought out as soon as the semantic tense has been anchored to syntactic tense. Or, in Tsai's (2008:681) own words: "to get a semantic tense anchored to a morpho-syntactic structure, is to get the event variable spelled out. [This can be done] by various types of strategies. English has tense morphology which does the job" but Chinese tense is

"weak" and, as a result, "cannot bring out the event variable by itself." Consequently, additional measures need to be taken so as to make sure that the event variable can be brought out. As we will see in a moment, the additional measures can be divided into two groups, one group of measures which in different ways support the T-node in the sentence and another group which brings out the event variable independently of tense.

For example, in the syntactic tree that Tsai adopts (2008:683), there are two different aspectual projections for outer aspect markers: one is above vP, the other is lower than vP. According to Tsai, aspectual elements occupying the head of the upper projection can directly hook up with T and in that way "tense anchor" the event, but the elements in the lower one cannot do so. This raising of Asp to T is a way of making the T strong enough to bind the event variable, just like in English.

For Mandarin, Tsai takes preverbal progressive marker *zài* and experiential aspect suffix *guo* to occupy the higher outer aspect, while *le* and *zhe* occupy the aspect position below vP. As a result, according to Tsai, *zài* and *guo* can move up to T to strengthen T so as to enable it to license the event variable, while *le* and *zhe* are too low to do the same. This is why (81a) - (81b) with *le* and *zhe* respectively are ungrammatical or "incomplete", while (82a) with *guo* and (82b) with *zài* are fine.

- (82) a. Akiu n á guo shū.
 take EXP book
 'Akiu took a book(s).'
- b. Akiu z ài kū.
 PROG cry
 'Akiu was crying.'

Still according to Tsai, if tense cannot do it, other operators bring out or bind the event variable ("Chinese employs all sorts of eventuality construals"; Tsai 2008:681). These have no direct relation to T (although, as we will see shortly, one of these, will be related to T after all, at least according to us), so that is why Tsai talks about a more general "Generalized Anchoring Principle". Examples of these eventuality construals are: sentence final *le*, negation, and event modification. These ways of licensing an event variable are illustrated as follows.

Sentence final *le* in Mandarin is an inchoative/evidential operator according to Tsai (2008:685). In a sentence modified by sentence final *le*, the event variable is brought out by being bound by this operator. That is why the incompleteness of the sentence is cancelled. (83) is from Tsai (2008:677 (6a), (6e)).

- (83) a. % Akiū n á le shū .
 take PERF book
 'Akiu took a book(s) '
 b. Akiū n á le shū le.
 take PERF book SFP
 'Akiu took a book(s).'

We can also look at this sentence from the perspective of tense binding introduced above, according to which an element like *le* in sentence final position can bind the tense variable in T (just like Cantonese *ge*³ and *lei*⁴). If we look at *le* this way, sentence final *le* is actually more directly related to Tense than Tsai assumes.

Next, according to Tsai (2008), the negative operator is like deontic operators that can help bring out an event variable. This can be seen in (84) (Tsai 2008:677 (6a), (6d)).

- (84) a. % Akiū n á shū.
 take book
 'Akiu take a book(s).'
 b. Akiū yīnggāi/ m á n á shū.
 should not take book
 'Akiu should have/has not taken a book(s).'

In (84b), the negative operator *m á* 'not' or *yīnggāi* 'should' is used, and the incompleteness is cancelled. Note that in terms of Tsai (2008) the deontic operator in (84b) belongs to the same class as the negative operator.

Finally, the explanation of the function of event quantification is also relevant to event variable licensing. An event that is quantified must be one whose event variable is spelt out. For instance, when a sentence is quantified

by a quantificational adverb, the event argument must be syntactically accessible. See (85) (Tsai 2008:676 (1a)).

- (85) Akiu yīzhí pǎo zhe.
 continuously run IMP
 'Akiu is running continuously.'

According to Tsai (2008), the adverb *yīzhí* 'continuously' modifies the event argument. By way of the modification, the event argument is made visible in syntax. As Tsai phrases it: "When an event argument is modified or predicated upon, it has to be visible in syntax" (Tsai 2008:682).

Tsai does not mention the case of manner adverbs, but as it turns out, they work in the same way, so we may as well add it to the inventory since manner adverbs can also function as licensors of the event argument, as is clear from the following Mandarin example:

- (86) a. %Zhāngsān chàng zhe gē.
 sing DUR song
 b. Zhāngsān dàshēngde chàng zhe gē.
 loudly sing DUR song
 'Zhangsan is singing loudly.'

In (86a), the sentence sounds incomplete; however, in (86b) where a manner adverb *dàshēngde* 'loudly' is added, the incompleteness is gone. Obviously, manner adverbs can help spell out the event variable.

To sum up, I introduced Tsai (2008), where it is argued that the event variable in a predicate must be bound ("brought out" or "spelt out") syntactically. The process of syntactic tense anchoring is one of the ways that languages use to do this. In languages with tense morphology, this process is straightforward. Tense in Mandarin, however, is "weak" as a result of which the situation is less straightforward. In Mandarin, an event argument is either brought out through syntactic derivation by the raising of Asp to T so as to make T strong enough to license the event argument, or it is made visible by

other strategies, which include event modification, event quantification and different types of operators

Importantly, for Tsai, not all aspectual elements can move up to T to make it strong so as to enable it to bind the event variable. This is one of the ideas in Tsai (2008) that I will use to explain the multifunctionality of ta^{21} in Chángshā.

2.7.3 Back to Chángshā

For the analysis of ta^{21} , we will follow the spirit of Tsai's proposal and adopt most but not all the details. So we adopt the basic idea that the event argument of an event must be brought out and that this can be done in different ways: by strengthening T or by using different means. The tree I have adopted is not exactly the same as the one in Tsai (2008), but, like Tsai, I assume, as we have argued, that aspectual markers expressing different semantics occupy different positions in the structure. In particular, in the structure I adopt, ta^{21}_{PERF} occupies a position which is higher than ta^{21}_{PROG} .

In Chapter 1 we saw that Sybesma (2017) proposes a structure that involves three inner aspect positions. According to Sybesma, the main function of the middle one of these, Asp2P, is to make the activity denoted by the verb which leads up to the endpoint inaccessible for further syntactic operations. I adopt the idea that there is an aspectual position between the RealizationP (Asp1P) and TelicityP (Asp3P), but I will modify its function. I assume that the function of Asp2 depends on what occupies this position. It can be occupied by elements that perform the function Sybesma describes (blocking the verbal activity to undergo any further syntactic operations), but it can also be occupied by elements that indicate the opposite, namely that the action is in progress. So I assume that ta^{21}_{PROG} is located in this position.

I locate ta^{21}_{PROG} in Asp2P for the following reasons (but I will come back to the location of ta^{21}_{PROG} in chapter 3, where the function of Asp2 will be further developed). First, as I have shown, in Chángshā there are two aspect markers that can be used to indicate the ongoingness of an action: preverbal $tsai^{21}ko^{24}$ and postverbal ta^{21}_{PROG} . These two particles can co-occur. The $tsai^{21}ko^{24}$ is like the progressive marker *zài* in Mandarin. It is widely assumed for Mandarin that both the progressive and the experiential aspect marker are

located in outer aspect position (Tsai 2008, Hú 2005 among many others). In view of its similarity in function, it makes sense to assume that $tsat^{21}ko^{24}$ is located in the outer aspect position as well. Assuming that, like in Mandarin, V ends up in little v and observing that ta^{21}_{PROG} follows the verb, ta^{21}_{PROG} must be in a position lower than little v. Secondly, the data so far shows that ta^{21}_{PROG} is different from ta^{21}_{PERF} in the sense that ta^{21}_{PERF} can be used on its own (in the sense that no other material needs to accompany it), while this is not the case for ta^{21}_{PROG} and in Tsai's framework this would mean that they cannot occupy the same position. More specifically, only one of them is high enough to make a connection with and in so doing strengthen T to enable it to license the event argument: this one is ta^{21}_{PERF} . This means that ta^{21}_{PROG} must be lower, which in the tree structure we adopted is Asp2P.

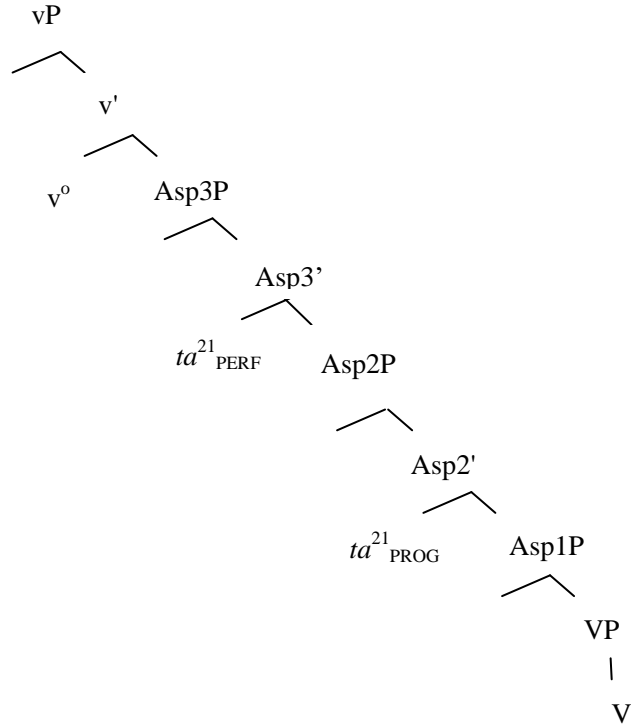
For the sake of completeness, I recall that, following Sybesma's (2017) ideas on the position of perfective *le*, that ta^{21}_{PERF} is, like *le*, located in inner aspect position but interpreted in outer aspect position. The main reason is the same as why Sybesma argues *le* to be below vP, namely the order of the different elements in BA-sentences. Just like Mandarin *le*, Chángshā ta^{21}_{PERF} always follows the verbal complex and if BA is in v^0 then ta^{21}_{PERF} cannot be in outer aspect (see for more details Chapter 1), despite the fact that that is the position where it is interpreted (see Chapter 1 and immediately below).

- (87) a. $tsan^{33}san^{33}$ ba^{41} $sou^{41}juan^{45}$ $ku^{24}de$ si^{24} ka^{41} ta^{21} .
 BA handkerchief cry SUB wet KA PERF
 'Tsansan cried such that the handkerchief got wet.'
 b. $tsan^{33}san^{33}$ ba^{41} $sou^{41}juan^{45}$ ku^{24} si^{24} ka^{41} ta^{21} .
 BA handkerchief cry wet KA PERF
 'Tsansan cried such that the handkerchief got wet.'

Furthermore, what is positive is that the outcome of these language internal reasoning corresponds to what is assumed by others for languages more generally, namely that PERF is higher than PROG. Harwood (2015), for instance, claims that perfect aspect should be contained, along with tense and modality, in a phrase which is higher than progressive aspect, which is lower, along with voice and the lexical verb (Harwood 2015:559).

The position of ta^{21}_{PERF} and ta^{21}_{PROG} is presented in (88).

(88)



I have already said a few times that both *le* and ta^{21}_{PERF} , despite the fact that they are located in inner aspect, are interpreted in outer aspect. This was discussed in more detail in Chapter 1. It is important to emphasize that there is a difference between Mandarin and the Xiāng dialects in two, I think, correlating respects. First, whereas in the Xiāng dialect Chángshā ta^{21}_{PERF} is able to strengthen T such that the latter is enabled to license the event argument, Mandarin *le* is not. The second difference is that the phenomenon that we see in the Xiāng dialect Chénxī, that both the outer and the inner aspect position are filled (see (89), repeated from Chapter 1), is not found in any Mandarin dialect. I suggest that these two differences are related: in the dialect group where we see that the relationship can be marked overtly (both positions are overtly filled; or, phrased differently: the outer aspect position is more active), the perfective marker can strengthen T so that it can bind the event argument, while in the dialect group where the relation is always covert (less active), the

perfective marker is unable to do so. Even though in Chángshā itself, the two positions are not simultaneously filled, it does belong to the dialect group in which this is in principle possible.

- (89) a. $t^h a^{33}$ τau^{24} ϵi^{41} $i^{33} fu$.
 3SG PERF wash clothes
 'He has washed his clothes.'
 b. $t^h a^{33}$ ϵi^{41} lia^{33} $i^{33} fu$.
 3SG wash PERF clothes
 'He has washed his clothes.'
 c. $t^h a^{33}$ τau^{24} ϵi^{21} lia^{33} $i^{33} fu$.
 3SG PERF wash PERF clothes
 'He has washed his clothes.'

On the basis of this, we conclude that in perfective sentences in Chángshā, the outer aspect position is active to the extent that it can help T to license the event argument (something which we don't see in Mandarin).

Chángshā ta^{21}_{PROG} cannot strengthen T, presumably, following Tsai's (2008) reasoning, because it is too low in the structure. Consequently, it cannot help T to license the event argument, as a consequence of which the sentence needs to be helped in other ways. That is why ta^{21}_{PROG} is always accompanied by other material. It is the other material that does what ta^{21}_{PROG} is unable to do itself. We will look at these cases again, now from the perspective of Tsai's anchoring approach

One of the elements that accompanies ta^{21}_{PROG} is $tsai^{21} ko^{24}$. So, how does $tsai^{21} ko^{24}$ "save" such ungrammatical sentences with ta^{21}_{PROG} as in (90)?

- (90) $t^h a^{33}$ $k^h an^{45}$ ta^{21} $ti \epsilon n^{45} si^{41}$ $*(tsai^{21} ko^{24})$.
 3SG watch IMP TV TSAIKO
 'He is watching TV.'

We have seen earlier on that sentence final $tsai^{21} ko^{24}$ is a tense operator setting the value of T to present: we saw that it functions like sentence final *le* in Mandarin and *lei⁴* and *ge³* in Cantonese. We take it that by overtly setting the value of T, $tsai^{21} ko^{24}$ strengthens T in Tsai's sense to enable it to bring out the

event argument. The fact that *ta*²¹_{PROG} is too low to move up to T itself is no longer a problem: the sentence is saved by sentence final *tsai*²¹*ko*²⁴. This way, the sentence with the progressive interpretation due to progressive marker *ta*²¹_{PROG} is grammatical.

Other cases are even more straightforwardly analyzable in the spirit of Tsai (2008). One of these cases was event modification. As I have pointed out, a sentence with *ta*²¹ modified by a manner adverb can have two readings. It can indicate that the action has been completed/terminated, but it can also indicate that the action is ongoing. Note again, that without the presence of the manner adverb, the progressive reading is not available, though this is not a problem for the perfective reading. Relevant examples are given in (91).

- (91) a. t^ha³³ k^hau³³ ta²¹ mən¹³.
 3SG knock PERF door
 'He knocked at the door.' (Only interpretation possible)
- b. t^ha³³ tɕ^hin tɕ^hin ti k^hau³³ ta²¹ mən¹³.
 3SG lightly knock PERF/IMP door
 'He knocked at the door lightly.'
 'He is knocking at the door lightly.'

Under the proposed anchoring approach, the ambiguity in (90) can be accounted for. *ta*²¹_{PERF} can enable T to license the event argument; it can do so itself, it needs no other elements to help. *ta*²¹_{PROG} on the other hand cannot strengthen T and needs help which it gets from the manner adverb – and that is why the adverb is not optional. The event modifier behaves as Tsai says it does: it brings out the event argument. Note that in Tsai (2008) event modification can also be done with a temporal modifier (like 'this morning'), however this is also the case for Chángshā. In Chángshā, a sentence with *ta*²¹ and a temporal modifier can only have a perfective reading.

- (92) tsan³³ san³³ jin³³ t^hian³³ shan²¹ u²¹ k^han⁴⁵ ta²¹ tian⁴⁵ s^hi⁴¹.
 today morning watch TA TV
 'Tsansan watched TV this morning.'
 *'Tsansan was watching TV this morning.'

In (92), the temporal phrase $j\dot{i}n^{33}t'ian^{33}shan^{21}u^{21}$ 'today' is used; ta^{21} in the sentence can only have perfective reading. This shows that temporal phrases in Chángshā cannot help license an event argument as they cannot so in Mandarin.

2.7.4 ta^{21} with the progressive aspect

In section 2.2.2.3, I showed that ta^{21} can always appear with the preverbal progressive marker $tsai^{21}ko^{24}$ with the sentence having a progressive reading. In traditional analyses, in these cases, ta^{21} is just treated as a progressive marker without further explanation. However as we have seen, it is not clear why ta^{21} should be a progressive marker here, since without the combination it also can be a perfective marker. However, now we see that the fact that ta^{21} can be combined with the progressive aspect is also related to the licensing of an event argument.

- (93) $t^h a^{33}$ $tsai^{21}ko^{24}$ $k^h an^{45}$ (ta^{21}) $tian^{45}si^{41}$.
 3SG PROG watch TA TV
 'He is watching TV.'

In (93) the sentence appears in the progressive, marked by the preverbal $tsai^{21}ko^{24}$, and ta^{21} can be but not necessarily has to be combined with it. In the traditional analysis, it is not clear why these two particles can be combined. In fact, no explanation has ever been given. Under the present approach, this can be nicely accounted for because we take this instance of ta^{21} as a progressive marker, which in this case get assistance from the other progressive marker. In Tsai (2008), the progressive marker $z\ddot{a}$ is located in outer aspect position, hence it can strengthen T directly, helping anchor the sentence to tense (Tsai 2008). I assume that the same is true in Chángshā, where the preverbal $tsai^{21}ko^{24}$, like $z\ddot{a}$ in Mandarin, also occupies a position from which it can raise to T or in any case strengthen it directly.

2.7.5 ta^{21} with negation and other licensors

We have seen that ta^{21} in combination with a negation can only be ta^{21}_{PROG} , as in (3), repeated here as (94).

- (94) a. $t^h a^{33}$ au^{21} $k^h an^{45}$ ta^{21} $tiən^{45} si^{41}$.
 3SG NEG watch PROG TV
 'He is not watching TV.'
 b. $t^h a^{33}$ $k^h an^{45}$ ta^{21} $tiən^{45} si^{41}$.
 3SG watch PERF TV
 'He watched TV.'

ta^{21} in (94a) can only have a progressive reading, while in (94b), without the negative marker, the progressive reading is not available. As we noted, if ta^{21} is exclusively treated as a perfective marker, the interpretation of (94a) is not easy to explain: it is not clear why in a negative construction the perfective marker must produce the progressive meaning (and in the greater context of Chinese linguistics it is not clear why the perfective marker would still be there at all, since it is generally in complementary distribution with the negative marker). Now that we have distinguished ta^{21}_{PROG} from ta^{21}_{PERF} , the observation in (94a) can be nicely accounted for. That is, in (94a), ta^{21} is used as a progressive marker. The negative marker mau^{21} 'not have' can license the event argument (Tsai 2008:681). Other mechanisms (like event coordination, event subordination counterfactuals) mentioned by Tsai also work with the use of ta^{21}_{PROG} in Chángshā.

- (95) a. $tsan^{33} san^{33}$ $i^{13} pian^{33}$ $k^h an^{45}$ ta^{21} $tiən^{45} shi^{41}$,
 on the one hand watch PROG TV
 $i^{13} pian^{33}$ $eiə^{41}$ ta^{21} $pao^{45} kao^{45}$.
 on the other hand write PROG report
 'Tsansan is watching TV and writing the report at the same time.'
 b. $tsan^{33} san^{33}$ $tə^{h13}$ ta^{21} ma^{41} $shan^{21} shan^{33}$.
 ride PROG horse climb mountain
 'Tsansan is climbing the mountain riding on a horseback.'

- c. tsan³³ san³³ k^han⁴⁵ ta²¹ tian⁴⁵ si⁴¹, ta³³ ti tɕi^{h33} tsi k^han⁴⁵
 watch PROG TV 3SG SUB wife read
 ta²¹ pau⁴⁵ tsi⁴¹.
 PROG newspaper
 'Tsansan is watching TV, his wife is reading a piece of newspaper.'
- d. xao²¹ shen³³ t^hi⁴⁵ ta²¹!
 carefully listen PROG
 'Listen carefully!'

(95a) is a case of event coordination, (95b) of event subordination, (95c) of conjunction and (95d) is an imperative. In all the sentences in (95), ta^{21} can be interpreted as a progressive marker, just as predicted by Tsai (2008) in combination with our claim that ta^{21} is a progressive marker positioned too low in the structure to be able to help T to license the event argument.

To sum up, above I first pointed out that it is better to take the two particles approach to explain the multifunction of ta^{21} . I pointed out that the two particles approach can avoid problems associated with the one particle approach. Then I provided three pieces of evidence to argue that there are two ta^{21} s: one is a perfective marker, the other a progressive marker. Having argued for the existence of two particles, I further provided an analysis to distinguish the two. I argued that the two particles are different in syntactic position. Though both ta^{21}_{PERF} and ta^{21}_{PROG} are located in inner aspect, ta^{21}_{PROG} is lower than ta^{21}_{PERF} . Since in the course of derivation, ta^{21}_{PERF} can link up to TP, through the process of which the event argument is brought out, while this is impossible for ta^{21}_{PROG} . As a result, when ta^{21}_{PROG} is used the sentence always needs other elements to strengthen T so that it can license (“bring out”) the event variable. These elements include event modification, event coordination, event subordination, negation, sentence final elements relevant to tense etc.

2.8 Summary of chapter 2

In this chapter, I provide an analysis of the interpretation and distribution of ta^{21} . I first evaluate a possible analysis which is found in the literature: the single ta^{21} approach. Theoretically, one could treat ta^{21} as a perfective marker

with other readings derived from it depending on the linguistic context. Yet I point out that this is not satisfactory. The main reason is that I cannot provide an account for the fact that ta^{21} can sometimes have two interpretations in the same context.

I then provide a new proposal: there are two particles: ta^{21}_{PERF} and ta^{21}_{PROG} , the former is a perfective and the latter is a progressive marker. To support my analysis, I provide three pieces of evidence: i) ta^{21} can have two interpretations when an event is modified by certain verbal adverbials; ii) in negative constructions, ta^{21} can only be interpreted as a progressive marker; iii) when sentence final $tsai^{21}ko^{24}$ (which I argue to be a tense operator) is used, ta^{21} can indicate the ongoingness of an event in an activity.

I continue to provide an analysis to disambiguate ta^{21}_{PERF} and ta^{21}_{PROG} by pointing out that the difference between ta^{21}_{PERF} and ta^{21}_{PROG} lies in the fact that ta^{21}_{PERF} is syntactically higher than ta^{21}_{PROG} . ta^{21}_{PERF} is inner aspect but interpreted in outer aspect; ta^{21}_{PROG} is also located in inner aspect position, lower than ta^{21}_{PERF} (I adopted Sybesma's 2017 structure that involves three layers in Inner aspect). In my analysis, I follow Tsai (2008), in assuming that i) an event variable needs to be syntactically licensed; ii) syntactic tense anchoring is a way of licensing the event variable; in English, tense being overt, T is strong enough to license the event variable, while in Mandarin, it is too weak to do so. To be an effective licenser, T needs to be supported one way or another.

In the spirit of Tsai's work, I propose that ta^{21}_{PERF} is syntactically higher than ta^{21}_{PROG} , and that it, though not physically in outer aspect itself, is in a relation with outer aspect such that it can strengthen T so that the latter can license the event variable. This explains why ta^{21}_{PERF} can stand alone in the sense that it need not be accompanied by other material. This is different for ta^{21}_{PROG} . I propose that ta^{21}_{PROG} is located lower than ta^{21}_{PERF} . Since it is too far away from outer aspect, blocked by the perfective aspect, it cannot strengthen T. Note that even if the head position of the highest AspP in inner aspect is not filled, the position/projection is still there. To salvage the sentence, other elements need to be present to help T to do its licensing job. That explains why ta^{21}_{PROG} is always accompanied by other material, unlike ta^{21}_{PERF} .

To strengthen the analysis presented in this chapter that there are two particles in Chángshā, in chapter 4, I analyze the particles *le* and *zhe* in Mandarin and one particle tao^{21} in Xùpǔ. I point out that ta^{21}_{PERF} and ta^{21}_{PROG} particles in Chángshā correspond to *le* and *zhe* in Mandarin and tao^{21}_{PERF} and tao^{21}_{PROG} in Xùpǔ. But before that, I provide an analysis of another Chángshā particle, ka^{41} in chapter 3.

Chapter 3. V+ka⁴¹

3.1 Introduction

In chapter 2, I presented an analysis of *ta*²¹ in Chángshā. I pointed out that *ta*²¹ is multifunctional. It is a perfective marker in some cases, while in other cases it is a progressive marker. The two particles are distinguished in their structural positions.

In this chapter, I turn to another aspectual particle: *ka*⁴¹. The particle *ka*⁴¹ is interesting in that it often appears in combination with the perfective *ta*²¹, though it can be used alone in some circumstances; in some cases, it even is interchangeable with the perfective *ta*²¹. To illustrate the latter, here are three sentences, from Wǔ (1999:56):

- (1) a. shan²¹ u⁴¹ ŋo⁴¹ mai⁴¹ ka⁴¹ xu³³ tɕiu²¹ fɛ¹³ k^hə⁴⁵ ta²¹.
 morning 1SG buy KA book then back go PERF
 'I went back home in the morning after I bought a book.'
- b. ŋo⁴¹ lau²¹ ka⁴¹ xau⁴¹ to³³ ɕiau⁴⁵ fa²¹.
 1SG make KA many mistake
 'I made a lot of foolish mistakes.'
- c. tsan³³ san³³ mai⁴¹ ka⁴¹ san³³ pən⁴¹ xy³³.
 buy KA three CL book
 'Tsansan bought three books.'

We come back to these cases (i.e., sentences in which *ka*⁴¹ operates as an independent perfective marker) only at the very end of this chapter (section 3.8). In the rest of the chapter, we concentrate on *ka*⁴¹ in sentences in which it is not a perfective marker, e.g., in sentences in which it co-occurs with perfective marker *ta*²¹.

We look at this use of *ka*⁴¹ in three different contexts. First, there are cases in which the use of *ka*⁴¹ is non-optional, in that its omission causes either ungrammaticality or a difference in interpretation. For instance in *BA*-sentences, and in sentences with achievements and change-of-state predicates, *ka*⁴¹ is obligatory. Without *ka*⁴¹, the sentences will be ungrammatical (see (2)).

- (2) a. tsan³³ san³³ si⁴¹ { *ta²¹/*ka⁴¹/ka⁴¹ ta²¹ }.
 die PERF KA KA PERF
 'Tsansan died.'
- b. tsan³³ san³³ pa⁴¹ i³³fu ɕi⁴¹ { *ta²¹/*ka⁴¹/ka⁴¹ ta²¹ }.
 BA clothes wash PERF KA KA PERF
 'Tsansan has washed his clothes (finished).'
- c. xu²¹iə²⁴tsi uaŋ¹³ { *ta²¹/*ka⁴¹/ka⁴¹ ta²¹ }.
 leaf yellow PERF KA KA PERF
 'Leaves have turned yellow.'

There are also cases in which *ka*⁴¹ is optional: whether *ka*⁴¹ is used (or not) does not affect the grammaticality or interpretation of a sentence; this is illustrated in (3).

- (3) tsan³³ san³³ k^han⁴⁵ (ka⁴¹) ta²¹ san³³ pən⁴¹ xy³³.
 read KA PERF three CL book
 'Tsansan read three books.'

Finally, there are also cases, such as [V+bare/definite noun object] constructions, in which case with *ka*⁴¹, the sentence has only one reading, while without *ka*⁴¹, it has two; see (4).

- (4) a. tsan³³ san³³ ɕi⁴¹ ta²¹ i³³fu .
 wash PERF clothes
 'Tsansan washed the clothes (finished).'
- 'Tsansan washed clothes (not finished).'
- b. tsan³³ san³³ ɕi⁴¹ ka⁴¹ ta²¹ i³³fu.
 wash KA PERF clothes
 'Tsansan washed the clothes (finished).'
- c. tsan³³ san³³ ɕi⁴¹ ka⁴¹ i³³fu ta²¹.
 wash KA clothes PERF
 'Tsansan washed the clothes (finished).'

These observations are significant for several reasons. First, in the previous literature, ka⁴¹ is treated as a perfective marker (see Cuī 1997, Lǐ 1991 and Wǔ 1991, 1999, 2005). However, this is not right; the data in (2) - (4) show that the use of ka⁴¹ is more complex.

Secondly, ka⁴¹ does not seem to have a counterpart in most other varieties of Chinese; in any case in Mandarin we don't see it; in sentences with achievements, the BA-construction or change-of-state predicates, no such element is needed in Mandarin.

Given the above considerations, I ask two questions in this chapter:

- a) What is the function and what is structural position of ka⁴¹?
- b) How can we explain the variation between Xiāng and other varieties of Chinese?

As I just said, in previous analyses (Cuī 1997, Lǐ 1991 and Wǔ 1999, among others), ka⁴¹ and ta²¹ are both treated as perfective particles. According to these analyses, the two differ only in their semantic interpretations or the different types of predicates they combine with. It is argued that ka⁴¹ only follows verbs that indicate *deletion*, *disappearance*, *consumption* etc., while ta²¹ does not have such restriction. It can, for instance, follow eventive predicates. ka⁴¹, these analyses say, always indicates the completion of an action, as opposed to ta²¹, which can also denote termination (as we also saw in chapter 2).

However, if we look closer, we see that the distribution and function of ka⁴¹ are far more complicated than what has previously been assumed. Rather than treating ka⁴¹ as a perfective marker, I will show that ka⁴¹ is an element that doubles an endpoint that is already present in an event. As we will explain, its function is to make the endpoint definitive and as such block the predicate which expresses the activity which leads up to the endpoint from undergoing any further syntactic operations.

The structure of this chapter is as follows. In section 3.2, I introduce the contexts in which ka⁴¹ is used and the interpretation of the sentences affected by the use of ka⁴¹. I divide the contexts in which ka⁴¹ is used into three types. In type one, ka⁴¹ is obligatory. In type two, ka⁴¹ is optional, but the interpretation of the sentences varies according to whether ka⁴¹ is used or not; in type three, ka⁴¹ is

optional without leading to differences in interpretation. In section 3.3, I introduce two previous analyses of ka^{41} , one of which argues that ka^{41} is a perfective marker; while the other argues that ka^{41} is an Extended Event Boundary marker. In section 3.4, I argue against the previous analyses, pointing out some new observations that the previous analyses cannot explain. In section 3.5, I present a reexamination of the semantic interpretation of ka^{41} . I point out that ka^{41} always appears in events where there already is an endpoint (or change of state). In some cases, the endpoint may be non-overt. As we will see, by adding ka^{41} , what happens is that the endpoint can no longer be lifted or be stripped off, it has become definitive. In section 3.6, I make a new proposal to account for the uses of ka^{41} . In section 3.7, I show that the proposed analysis can be used to account for the data presented in the beginning of the chapter. In section 3.8, I discuss the data in (1) and 3.9 is a summary of the chapter.

3.2 The data

In this section, I am going to provide a description of the syntactic distribution of ka^{41} and the interpretation of the sentences with ka^{41} . I start the description with the contexts in which ka^{41} is obligatory; the omission of ka^{41} will cause ungrammaticality. These contexts include achievements, the *BA*-construction, and change of state predicates. In these contexts, the endpoint of an event is inherent, but ka^{41} is still obligatory.

Then I move on to introduce two types of contexts in which ka^{41} is optional, in one of which the insertion/omission of ka^{41} will lead to difference in interpretation of the sentences; these include resultative constructions and accomplishments with quantized objects or postverbal durative/frequentative adverbials.

In the presentation of the data, ta^{21}_{PERF} occurs regularly. I use ta^{21} instead of ta^{21}_{PERF} for convenience in this chapter.

3.2.1 ka^{41} as obligatory

With achievements, in *BA*-sentences and with change-of-state predicates, ka^{41} is obligatory. In these three types of cases, ka^{41} must be there. The deletion of

*ka*⁴¹ will make the sentences ungrammatical. Note that for comparison, I will also point out that in the same cases in Mandarin, no such element is needed.

3.2.1.1 *ka*⁴¹ in achievements

With only a few exceptions, achievement verbs always co-occur with *ka*⁴¹. Let us first look at *ka*⁴¹ in achievements in the perfective. Sentences with an achievement in the perfective expressed by the perfective marker *ta*²¹, always contain *ka*⁴¹ as well. This is shown in (5).

- (5) a. t^ha³³ mən²¹ tsau⁴¹ tɕiu²¹ tau⁴¹ {ka⁴¹ ta²¹/*ka⁴¹/*ta²¹}.
 3PL early then arrive KA PERF
 'They have arrived long time ago.'
- b. ts^hə³³ tsi fan³³ {ka⁴¹ ta²¹/*ka⁴¹/*ta²¹}.
 car turn over KA PERF
 'The car turned over.'
- c. Tsansan xy³³ {ka⁴¹ ta²¹/*ka⁴¹/*ta²¹}.
 lose KA PERF
 'Tsansan lost (the game).'

The verbs *tau*⁴¹ 'arrive', *fan*³³ 'turn over' and *xy*³³ 'lose' are achievement predicates, and the sentences in (5) show that when presenting these events in the perfective, *ka*⁴¹ is obligatory, the perfective marker *ta*²¹ cannot do it alone.

Only in a few cases of achievements is *ka*⁴¹ optional. These cases include the verbs *lai*¹³ 'come' and *tsou*⁴¹ 'leave'. The interpretation of the sentences differs whether or not *ka*⁴¹ is used.

- (6) a. tsan³³ san³³ lai¹³ ta²¹.
 come PERF
 'Tsansan has come (he may be here or may no longer be here).'
- b. tsan³³ san³³ lai¹³ ka⁴¹ ta²¹.
 come KA PERF
 'Tsansan has come (he is here now).'

- (7) a. tsan³³ san³³ lai¹³ ta²¹, iou²¹ tsou⁴¹ ka⁴¹ ta²¹.
 come PERF again leave KA PERF
 'Tsansan has come, (but) he has left again.'
 b. *tsan³³ san³³ lai¹³ ka⁴¹ ta²¹, iou²¹ tsou⁴¹ ka⁴¹ ta²¹.
 come KA PERF again leave KA PERF

*ka*⁴¹ is absent in (6a) - (7a) and present in (6b) and (7b). As shown in the translation, in both cases we focus on the realization (he has come), but in the sentence with *ka*⁴¹ there is focus on the resulting state: Tsansan has come here and he is here now. The endpoint is definitive. For instance, if only *ta*²¹ is used, the sentence can be followed by a clause indicating the consecutive action of leaving, (7a). However, this is not possible if *ka*⁴¹ is used, (7b). What's more, when there is no follow-up clause indicating the consecutive action, the sentence sounds more natural if *ka*⁴¹ is used. As mentioned, of all the achievement verbs, only *lai*¹³ 'come' and *tsou*⁴¹ 'leave' can appear in the perfective with *ta*²¹ alone. In all other cases, *ka*⁴¹ must be used.

Next we observe that in a sentence in which the achievement verb is embedded under a modal verb, *ka*⁴¹ is also desirable, if not obligatory.

- (8) a. la⁴⁵ tsa²⁴ niau⁴¹ kan⁴⁵ ian²¹ tsi xui²¹ ɕi⁴¹ ka⁴¹.
 DEM CL bird from.the.look.of.it will die KA
 'It seems that that bird is bound to die.'
 b. ?la⁴⁵ tsa²⁴ niau⁴¹ kan⁴⁵ ian²¹ tsi xui²¹ ɕi⁴¹.
 DEM CL bird from.the.look.of.it will die
 'It seems that that bird will die.'

- (9) a. li⁴¹ tsai⁴⁵ uan¹³ tixua²¹ xui²¹ xy³³ ka⁴¹.
 2SG again play if will lose KA
 'If you continue to play (cards) more, you are bound to (lose the game).'
 b. ?li⁴¹ tsai⁴⁵ uan¹³ tixua²¹ xui²¹ xy³³.
 2SG again play if will lose
 'If you continue to play more, you may lose (the game).'

In (8) - (9), the modal verb *xui*²¹ 'will' is used, embedding the achievement predicate, and *ka*⁴¹ is preferred. The sentences indicate that a possible change is sure to take place. Thus, in (8a), with *ka*⁴¹, the sentence means that the bird is sure to die. Note that without *ka*⁴¹, the sentence is marginally acceptable, and sounds a bit unnatural, which is marked by the question mark. The sentences without *ka*⁴¹ only indicate a possibility (if they are good at all). For instance, in (9b), the sentence just means that the bird may die. Note that in these cases, since these are not sentences in the perfective, *ta*²¹ cannot appear, as shown in (10) - (11).

- (10) **la*⁴⁵ *tʂa*²⁴ *niau*⁴¹ *kan*⁴⁵ *ian*²¹ *tsi* *xui*²¹ *ɕi*⁴¹ *ka*⁴¹ *ta*²¹.
 DEM CL bird from.the.look.of.it will die KA PERF

- (11) **li*⁴¹ *tsai*⁴⁵ *uan*¹³ *tixua*²¹ *xui*²¹ *xy*³³ *ka*⁴¹ *ta*²¹.
 2SG again play if will lose KA PERF

In short, in achievements, *ka*⁴¹ is obligatory. In what follows I show that with change-of-state predicates, *ka*⁴¹ is also obligatory.

3.2.1.2 *ka*⁴¹ in stative predicates expressing change-of-state

In Mandarin, a change of state adjective predicate can be used with the perfective marker *le* producing a change of state reading; See (12).

- (12) a. *huā* *hóng* *le*.
 flower red PERF
 'The flowers have turned red.'
 b. *Zhāngsān shòu* *le*.
 thin PERF
 'Zhangsan has become thin.'

Different from Mandarin, in Chángshā in the same cases, for the sentence to have a change of state reading, *ka*⁴¹ is obligatory; the perfective marker *ta*²¹

cannot stand alone in such a sentence. (13a) - (13b) are the counterparts of (12a) - (12b).

- (13) a. xua³³ xɛn¹³ {ka⁴¹ ta²¹/*ka⁴¹/*ta²¹}.
 flower red KA PERF KA PERF
 'The flowers have turned red.'
- b. Tsan³³ san³³ sou⁴⁵ {ka⁴¹ ta²¹/*ka⁴¹/*ta²¹}.
 thin KA PERF KA PERF
 'Tsansan has become thin.'

The sentences in (13) show that *ka*⁴¹ and *ta*²¹ cannot appear on their own to indicate a change of state with stative predicates; if they appear together, the sentences are fine. In comparison with Mandarin, it seems that with stative predicates, *ka*⁴¹ and *ta*²¹ together do the job that *le* does in Mandarin on its own. I will come back to this observation later.

3.2.1.3 *ka*⁴¹ in BA-sentences

In a BA-sentence, *ka*⁴¹ is also obligatory. I have mentioned the BA-construction in chapter 1, now I will show briefly the use of *ka*⁴¹ in BA-sentences, but I will come back to a more detailed treatment of the BA-construction in section 3.5.2. As we saw in chapter 1, a BA-sentence is a sentence in which the direct object is placed immediately after the particle BA and before the verb (14b). The word order is SOV while the basic order in Chinese languages is SVO. Many sentences have a BA-counterpart, which do not have much difference in meaning. The difference between the two is mostly a matter of information structure. (15) - (16) illustrate the construction.

- (14) a. [S+V+O]
 b. [S + BA +O +V]
- (15) a. Zhāngsān xǐ le yīfu.
 wash PERF clothes
 'Zhangsan washed the clothes.'

- b. Zhāngsān bǎ yīfu xǐ le.
 BA clothes wash PERF
 'Zhangsan washed the clothes.'

- (16) a. Zhāngsān hē le shuǐ.
 drink PERF water
 'Zhangsan drank the water.'
 b. Zhāngsān bǎ shuǐ hē le.
 BA water drink PERF
 'Zhangsan drank the water.'

In (15b) - (16b), the *BA*-NPs *yīfu* 'clothes' and *shuǐ* 'water' are the logical object of the verb *xǐ* 'wash' and *hē* 'drink' respectively. Different from the cases in (15a) - (16a), where they follow the verbs, instead, in *BA*-sentences they are located before the verbs (15b) - (16b).

The *BA*-sentence has been widely discussed for Mandarin. The basic meaning of the construction is 'disposal', it means that 'someone has done something to somebody' (Wáng 1947). But I delay the introduction of the relevant discussion till section 3.5.2. What I focus on now is the use of *ka*⁴¹ in the Chángshā counterpart of the *BA*-construction. As can be seen above, in Mandarin, a *BA*-sentence can be presented in the perfective using the perfective marker *le*, as is the case in a non-*BA*-sentence. However, this is not the case for Chángshā. In Chángshā, to present a *BA*-construction in the perfective, *ka*⁴¹ is always needed.

What I observe is, as with achievements and change-of-state predicates, *ka*⁴¹ is obligatory in a *BA*-sentence. It is quite different from a non-*BA*-sentence. We compare a-sentences with b-sentences in (17) - (18). (I use "*BA*" to generalize over the object marker in such sentences in the different varieties of Chinese.)

- (17) a. ŋo⁴¹ ɕi⁴¹ (ka⁴¹) ta²¹ i³³fu³³.
 1SG wash KA PERF clothes
 Without *ka*⁴¹: 'I washed (the) clothes (not necessary finished).'
 With *ka*⁴¹: 'I washed the clothes (finished).'

- b. ɲo⁴¹ pa⁴¹ i³³fu³³ ɕi⁴¹ {ka⁴¹ta²¹/ *ka⁴¹/ *ta²¹}.
 1SG BA clothes wash KA PERF
 'I washed the clothes (finished).'

- (18) a. ɲo⁴¹ k^han⁴¹ (ka⁴¹) ta²¹ la⁴⁵ pən⁴¹ xu³³.
 1SG read KA PERF DEM CL book
 Without *ka*⁴¹: 'I read (in) that book (not necessary finished).'
- OR: 'I read that book (finished).'
- With *ka*⁴¹: 'I read that book (finished).'
- b. ɲo⁴¹ pa⁴¹ la⁴⁵ pən⁴¹ xu³³ k^han⁴¹ {ka⁴¹ta²¹/ *ka⁴¹/ *ta²¹}.
 1SG BA DEM CL book read KA PERF
 'I read that book (finished).'

In (17a) - (18a), *ka*⁴¹ is optional in the sense that its insertion or omission does not affect the grammaticality. But with *ka*⁴¹, the sentences get a completion reading, while without *ka*⁴¹, the sentences may indicate termination or completion (we will discuss sentences with bare NP objects in more detail below). In (17b) - (18b), on the other hand, *ka*⁴¹ is obligatory, and we see that the events are presented as having reached their final endpoint. More examples can be seen in (19) - (20).

- (19) a. t^ha³³ kuan³³ (ka⁴¹) ta¹³ tiən⁴⁵shi⁴¹.
 3SG close KA PERF TV
 Without *ka*⁴¹: 'He turned off the TV
 (may or may not have succeeded).'
- With *ka*⁴¹: 'He turned off the TV (succeeded).'
- b. t^ha³³ pa⁴¹ tiən⁴⁵shi⁴¹ kuan³³ {ka⁴¹ta¹³/ *ka⁴¹/ *ta²¹}.
 3SG BA TV close KA PERF
 'He turned off the TV (succeeded).'

- (20) a. t^ha³³ sha²⁴ (ka⁴¹) ta²¹ la⁴⁵ lian⁴¹ ko⁴⁵ zen¹³.
 3SG kill KA PERF that two CL people
 Without ka⁴¹: 'He killed those two persons (they may or may not
 have died).'
- With ka⁴¹: 'He killed those two persons (definitely died).'
- b. t^ha³³ pa⁴¹ la⁴⁵ lian⁴¹ ko⁴⁵ zen¹³ sha²⁴ { ka⁴¹ ta²¹/*ka⁴¹/*ta²¹ } .
 3SG BA that two CL persons kill KA PERF
 'He killed those two persons (definitely died).'

The above shows that in Chángshā, ka⁴¹ is obligatory in the *BA*-sentences, and optional in non-*BA*-sentences. While in the same case in Mandarin *BA*-construction, there is no ka⁴¹ but the meaning is the same as in the Chángshā sentence with ka⁴¹.

The above sentences are in the perfective, with perfective marker ta²¹. Note that in non-perfective *BA*-sentences ka⁴¹ is still obligatory; this means that the presence of ka⁴¹ has nothing to do with the perfective. See (21).

- (21) a. t^ha³³ i²⁴ tein⁴⁵ mən¹³, tɕiu²¹ pa⁴¹ xai¹³ tsi t^ho²⁴ ka⁴¹.
 3SG as soon as enter door JIU BA shoes take off KA
 'He takes off his shoes as soon as he comes into the door.'
- b. uan⁴⁵ san²¹, li⁴¹ pa⁴¹ mən¹³ kuan³³ ka⁴¹.
 evening 2SG BA door close KA
 'Close the door in the evening.'

In (21a), the *BA*-sentence describes a habitual situation, (21b) is an imperative. In both cases, ka⁴¹ is obligatory.

To sum up, above, I have introduced different types of contexts in which ka⁴¹ is obligatory. First, with achievements, change-of-state predicates and in the *BA*-constructions (accomplishments in fact), ka⁴¹ is obligatory in the sense that its omission will cause ungrammaticality. Second, in other cases (the non-*BA*-counterparts of *BA*-sentences), the interpretation of a sentence varies depending on whether ka⁴¹ is used, which means that to get a certain meaning, it is obligatory. Without ka⁴¹, such sentences have two interpretations: either the action has been terminated or completed, while with ka⁴¹, there is only one

interpretation: the action has been completed or brought to a successful end. We will look at these and similar examples in more detail below, in section 3.2.3.

These circumstances in which *ka*⁴¹ is obligatory are important for me, since they will help me in the analysis of the function of *ka*⁴¹. But before I get to the analysis, I introduce another type of context, in which *ka*⁴¹ is really optional: the use of *ka*⁴¹ does not lead to differences in acceptability or interpretation. These contexts are resultative constructions, [V+numeral+object] sentences and [V+durative/frequentative+object] sentences. For comparison, I will also mention the corresponding sentences in Mandarin.

3.2.2 Optional *ka*⁴¹

3.2.2.1 *ka*⁴¹ in resultative constructions

A resultative construction contains two predicates, with the second one indicating the result of the action denoted by the first. We have seen this construction in chapter 1. For convenience, (22) is presented for illustration of the resultative construction in Mandarin.

- (22) a. wǒ xiě wán le zuò yè
 1SG write done PERF homework
 'I finished my homework.'
- b. Zhāngsān kū hóng le yǎnjīng.
 cry red PERF eyes
 'Zhangsan cried his eyes red.'

In (22), *wán* 'done' and *hóng* 'red' indicate the result of the action denoted by *xiě* 'write' and *kū* 'cry'. *le* marks the perfective. In Chángshā, in the same cases, *ta*²¹ instead of *le* can be used, and the sentences obtain a completion reading. However, what is interesting is that *ka*⁴¹ can also be added to such sentences. This is illustrated in (23).

- (23) a. ɲo⁴¹ ɕiə⁴¹ oŋ¹³ (ka⁴¹) ta²¹ tso²⁴ iə²⁴.
 1SG write done KA PERF homework
 'I finished my homework.'
- b. tsan³³ san³³ k^hu²⁴ xən¹³ (ka⁴¹) ta²¹ ɲiä⁴¹ jin³³.
 cry red KA PERF eyes
 'Tsansan cried his eyes red.'

In (23a) - (23b), *ka*⁴¹ can be used but it is optional, although it must be noted that the use of *ka*⁴¹ makes the sentence sound more natural and that there is a subtle difference in the interpretation depending on whether *ka*⁴¹ is used. In sentences with *ka*⁴¹, the change of state meaning is more prominent, more definitive. More examples can be seen in (24).

- (24) a. tsuo²⁴ uan⁴¹ shan⁴¹ ɲo⁴¹ pəi²¹ lei¹³ shən³³ xə²⁴ ɕin⁴¹ (ka⁴¹) ta²¹.
 last night 1SG BEI thunder scare awake KA PERF
 'I was scared awake by the thunder last night.'
- b. tsi²⁴ lian⁴¹ ti¹³ kao³³ (ka⁴¹) ta²¹.
 quality raise high KA PERF
 'The quality has been improved.'
- c. tsan³³ san³³ pəi²¹ tən⁴⁵ tis kuan⁴¹ tao⁴¹ (ka⁴¹) ta²¹.
 BEI bench stumble fall KA PERF
 'Tsansan stumbled over the bench.'
- d. tsan³³ san³³ tɕ^hia²⁴ tsɛ⁴⁵ (ka⁴¹) ta²¹.
 drink drunk KA PERF
 'Tsansan got drunk.'

In (24), we see that we can add *ka*⁴¹ to the sentences that already have a result denoting element. As noted, *ka*⁴¹ is optional but with it, these sentences sound more natural. We can interpret this and say that *ka*⁴¹ is preferred.

3.2.2.2 *ka*⁴¹ with [V+quantized+object]

*ka*⁴¹ is also optional in sentences with [V+numeral+objects] and [V+durative/frequentative +objects].

- (25) *tsan*³³*san*³³ *k*^h*an*⁴⁵ (*ka*⁴¹) *ta*²¹ *san*³³*pən*⁴¹ *xy*³³.
 read KA PERF three CL book
 'Tsansan has read three books (finished the books).'
- (26) *tsan*³³*san*³³ *iou*¹³ (*ka*⁴¹) *ta*²¹ *san*³³ *ko*⁴¹ *ɕiao*⁴¹*si*¹³ *iun*⁴¹.
 swim_V KA PERF three CL hour swim_N
 'Tsansan has swum for three hours (he has stopped now).'
- (27) *tsan*³³*san*³³ *k*^h*an*⁴⁵ (*ka*⁴¹) *ta*²¹ *san*³³ *ko*⁴⁵ *ɕiao*⁴¹*si*¹³ *xy*³³.
 read KA PERF three CL hours book
 'Tsansan has read for three hours (he has stopped now).'
- (28) *tsan*³³*san*³³ *k*^h*an*⁴⁵ (*ka*⁴¹) *ta*²¹ *san*³³ *ts*^h*i*⁴⁵ *ko*²⁴ *pu*²¹ *tian*⁴⁵ *in*⁴¹.
 watch KA PERF three times DEM CL movie
 'Tsansan watched this movie three times.'

In (25), the object is quantized (we already saw such sentences in chapter 2), in (26) - (27), a durative phrase *san*³³*ko*⁴⁵*ɕiao*⁴¹*si*¹³ 'three hours' is used to modify the duration of the actions and in (28), a frequentative adverb is used. In all these cases, the insertion/omission of *ka*⁴¹ does not lead to any difference in interpretation.

3.2.3 Omission/insertion of *ka*⁴¹ leads to different meaning

When we discussed the *BA*-sentences, we saw that the non-*BA*-counterparts of these are ambiguous and that they are disambiguated when *ka*⁴¹ is inserted. We look at some more examples here.

3.2.3.1 ka⁴¹ with [V+bare noun object]

In [V+bare noun object] sentences, the use of ka⁴¹ will lead to a difference in the interpretation; we saw an example in (4), repeated as (31); and here are two more examples:

- (29) a. tsan³³ san³³ iou¹³ ka⁴¹ iun⁴¹ ta²¹.
swim_V KA swim_N PERF

'Tsansan did a swim.'

- b. tsansan³³ iou¹³ ka⁴¹ ta²¹ iun⁴¹.
swim_V KA PERF swim_N

'Tsansan did a swim.'

- c. tsansan³³ iou¹³ ta²¹ iun⁴¹.
swim_V PERF swim_N

'Tsansan did a swim.'

OR: 'Tsan swam.'

- (30) a. ŋo⁴¹ p^hao⁴¹ ka⁴¹ pu²¹ ta²¹.
1SG run KA step PERF

'I did a run.'

- b. ŋo⁴¹ p^hao⁴¹ ka⁴¹ ta²¹ pu²¹.
1SG run KA PERF step

'I did a run.'

- c. ŋo⁴¹ p^hao⁴¹ ta²¹ pu²¹.
1SG run PERF step

'I did a run.'

OR: 'I ran.'

- (31) a. tsan³³ san³³ ɕi⁴¹ ka⁴¹ ta²¹ i³³fu.
wash KA PERF clothes

'Tsansan washed the clothes (finished).'

- b. tsan³³ san³³ ɕi⁴¹ ka⁴¹ i³³fu ta²¹.
wash KA clothes PERF

'Tsansan washed the clothes (finished).'

- c. tsan³³ san³³ ɕi⁴¹ ta²¹ i³³ fu .
 wash PERF clothes
 'Tsansan washed the clothes (finished).'
 OR: 'Tsansan washed clothes (not finished).'

As we already briefly noticed above (see (17a)), in sentences with a bare noun phrase object, sentences without *ka*⁴¹ may have two readings, completion or termination, but if *ka*⁴¹ is used, there is only one reading, completion. In these sentences, when we have the completion reading, we talk about a predetermined stretch that we would swim or run, or a definite set of clothes to wash. The point of these sentences is that with *ka*⁴¹ there is only one interpretation: the event is presented as having an endpoint, without *ka*⁴¹, the sentence may have two readings.

3.2.3.2 *ka*⁴¹ with [V+definite noun object] (i.e., with a demonstrative)

That the use of *ka*⁴¹ can affect the interpretation of a sentence can also be seen in [V+ definite noun object] accomplishments; we looked at some examples above (e.g., (18a)). Here are the details. Note that with “definite phrase” I refer to an NP which contains a demonstrative.

- (32) a. tsan³³ san³³ k^han⁴⁵ ta²¹ la⁴⁵ pən⁴¹ xy³³.
 read PERF that CL book
 'Tsansan read in that book (not necessary finished the book).'
 OR: 'Tsansan read that book (finished it).'
 b. tsan³³ san³³ k^han⁴⁵ ka⁴¹ ta²¹ la⁴⁵ pən⁴¹ xy³³.
 read KA PERF that CL book
 'Tsansan read that book (finished it).'

In (32a), the object noun contains a demonstrative, *ta*²¹ is used, and the sentence gets two interpretations. However, if *ka*⁴¹ is used, there is only one interpretation left, (32b). One more example is given in (33).

- (33) a. tsan³³ san³³ sha²⁴ ta²¹ la⁴⁵ ko⁴⁵ zən¹³.
 kill PERF that CL person
 'Tsansan killed that person (that person may or may not have died).'
 b. tsan³³ san³³ sha²⁴ ka⁴¹ ta²¹ la⁴⁵ ko⁴⁵ zən¹³.
 kill KA PERF that CL person
 'Tsansan killed that person (the person died).'

Note further that in accomplishments embedded under a modal verb, we can make the same observation.

- (34) tsan³³ san³³ ɕian⁴¹ k^han⁴⁵ (ka⁴¹) la⁴⁵ pən⁴¹ xy³³.
 want read KA that CL book
 With *ka*⁴¹: 'Tsansan wanted to read (and finish) that book.'
 Without *ka*⁴¹: 'Tsansan wanted to read (in) that book.'
- (35) tsan³³ san³³ ɕian⁴¹ sa²⁴ ka⁴¹ la⁴⁵ ko⁴⁵ zən¹³.
 want kill KA that CL person
 'Tsansan wants to kill that person.'

The sentences in (34) - (35) show that in sentences with a modal verb, *ka*⁴¹ can be used in combination with accomplishments involving a definite noun phrase object. These sentences have an endpoint reading. For instance, in (34), with *ka*⁴¹, the subject wants to read the whole book, and in (35), with *ka*⁴¹, the subject wants to really kill that person. Here are some more examples, with *k^ho⁴¹i⁴¹* 'can' instead of *ɕian*⁴¹ 'want'.

- (36) tsan³³ san³³ k^ho^{41,41}i⁴¹ k^han⁴⁵ ka⁴¹ la⁴⁵ pən⁴¹ xy³³.
 can read KA that CL book
 'Tsansan can read (and finish) that book.'
- (37) tsan³³ san³³ k^ho^{41,41}i⁴¹ sha²⁴ ka⁴¹ la⁴⁵ ko⁴⁵ zən¹³.
 can kill KA that CL person
 'Tsansan can kill that person.'

3.2.4 Summary

To sum up, I have shown above three type of contexts in which ka^{41} is used. In type one, ka^{41} is obligatory. The deletion of ka^{41} will make the sentence ungrammatical. These contexts involve achievements, the *BA*-construction and change-of-state predicates. In type two, I pointed out that in accomplishments with a resultative and those with a quantized objects or with postverbal durative/frequentative adverbials, ka^{41} is optional without leading to a difference in the interpretation of the sentences. In type three, ka^{41} is optional, but the interpretation of the sentence will vary depending on whether ka^{41} is used or not. These contexts include VPs containing bare noun objects or noun objects with a demonstrative. As to such sentences with ka^{41} , they have only one reading, without ka^{41} , they may have two readings. For convenience, the distribution and interpretation of sentences with ka^{41} is presented in (38).

(38)

(i) ka^{41} as obligatory

With achievements, the *BA*-construction, change-of-state predicates

- a. without ka^{41} → ungrammatical
- b. with ka^{41} → completion

(ii) ka^{41} as optional without variation in interpretation

A. with a quantized noun object

- a. without ka^{41} → completion
- b. with ka^{41} → completion

B. with resultative constructions

- a. without ka^{41} → completion
- b. with ka^{41} → completion

(iii) ka^{41} as optional with variation of the interpretation of the sentences

A. with a bare noun object

- a. without ka^{41} → termination or completion
- b. with ka^{41} → completion

B. with a definite noun object (DEM-N)

- a. without ka^{41} → termination or completion
- b. with ka^{41} → completion

As can be seen in (38), sentences with *ka*⁴¹ invariably have a completion reading, and sentences without *ka*⁴¹, have either termination or completion reading.

The goal of this chapter is to answer the questions: What is the function of *ka*⁴¹ and what is its structural position? Before answering these questions, I introduce two approaches to the use of *ka*⁴¹ in the literature.

3.3 Overview of the existing literature

As mentioned before, for a long time, *ka*⁴¹ was treated as a perfective marker. Only recently, it has been noticed that further consideration is required to account for the use of *ka*⁴¹. In this section, I first introduce two previous approaches and then point out some facts that these two approaches fail to account for.

3.3.1 *ka*⁴¹ as a perfective marker

In works dealing with Xiāng grammar, it is widely assumed that *ka*⁴¹ is a perfective marker. For instance, Lǐ points out that “*ka*⁴¹ is equivalent to *le* in Mandarin, and *le* is supposed to be a perfective marker” (Lǐ, 1991:549). Zhōu (1998) makes a similar claim: “Corresponding to the perfective *le* in Mandarin, the perfective is encoded by the marker *ka*⁴¹ in Xiāng, which is used to signify the completion of the action/activity before another event or time, regardless of the deictical time frames (the past, the present, or the future)” (Zhōu 1998:11). Other authors, such as Cuī (1996) and Lú (2007), also claim that *ka*⁴¹ is a perfective marker. Wǔ (1991, 1994, and 1999) has carried out a comprehensive investigation into the aspectual system of Xiāng. When it comes to *ka*⁴¹, she holds that “... *ka*⁴¹ is a perfective marker occurring immediately after a verb indicating potential result ...or completion in the structure [V+ *ka*⁴¹ +Q⁴+ (MOD⁵)] and [V₁+ ASP+ (Q/NP) +V₂]”⁶ (Wǔ 1999:55). To be more specific,

⁴ Q indicates objects containing a numeral.

⁵ MOD refers to mood particle used to express affirmation, question or exclamative mood.

in Wǔ (1999), the structure [V+ ka⁴¹ +Q+ (MOD)] refers to those structures describing accomplishments that contain quantized objects. Wǔ does not explain what a potential result is. I take it to refer to the constructions that describe telic events including resultatives. For instance, in (39), ka⁴¹ indicates the potential result, in (40) (which we already saw in (1)), ka⁴¹ indicates the completion of the action. (39) - (40) are taken from Wǔ (1999:56).

- (39) a. kən⁴¹tin⁴⁵ xui²¹ p^hao⁴¹ ka⁴¹.
 be sure will run KA
 'I am sure (it) will run away.'
- b. tsan³³san³³ xai¹³ shə⁴¹pu⁴⁵tə tiu³³ ka⁴¹.
 still NEG want throw KA
 'Tsansan still does not want to throw it away.'
- (40) a. shan²¹u⁴¹ŋo⁴¹ mai⁴¹ ka⁴¹ xu³³ tɕiu²¹ fe¹³ k^hə⁴⁵ ta²¹.
 morning 1SG buy KA book then come back PERF
 'I went back home in the morning after I bought a book.'
- b. ŋo⁴¹ lau²¹ ka⁴¹ xau⁴¹to³³ ɕiau⁴⁵fa²¹.
 1SG make KA many mistake
 'I made a lot of foolish mistakes.'

Wǔ further points out that ka⁴¹ differs from ta²¹ in that ka⁴¹ follows a verb indicating *deletion*, *destruction*, or *consumption*, and it requires that the object contains a numeral.⁷

- (41) a. tsan³³san³³ mai⁴¹ ka⁴¹ san³³ pən⁴¹ xy³³.
 buy KA three CL book
 'Tsansan bought three books.'

⁶ Note that according to Wǔ (1999), ka⁴¹ developed from the verb ɕie⁴¹ meaning 'disappear', 'delete' etc., while ta²¹ developed from the verb te²¹ that means 'achieve'. In chapter 4 below, I will argue that this is in fact not the case.

⁷ Please note that sentences like the ones in (42) and (43) were not presented in the overview of the data above except that they were mentioned at the very beginning (example (1)). I will discuss them in section 3.8. The same holds for the examples in (46)-(47).

- b. *tsan³³ san³³ mai⁴¹ ka⁴¹ xy³³.
 buy KA book

Intended: 'tsansan bought some books.'

(41a) is grammatical, while (41b) is not. According to Wǔ, the ungrammaticality of (41b) lies in the fact that the object in it does not contain a numeral.

I will discuss Wǔ's approach shortly.

3.3.2 ka⁴¹ as an "Extended Event Boundary" marker

Shěn (1995) observes that a numeral phrase can affect the grammaticality of a sentence (see also Lù 1988). For instance, the following a-sentences are ungrammatical; however, if the object contains a numeral, the ungrammaticality disappears (see b-sentences) (from Shěn 1995:371). These sentences are in Mandarin. They are relevant to my analysis in the sense that boundedness in the sentences affects their grammaticality.

- (42) a. *chénɡ wǎn lǐ yú
 put bowl in fish
 b. chénɡ wǎn lǐ liǎng tiáo yú
 put bowl in two CL fish
 '(He) put two fish into the bowl.'

- (43) a. *sòng xuéxiào yóuhuà
 send school painting
 b. sòng xuéxiào yī fù yóuhuà
 send school one CL painting
 '(He) sent a painting to the school.'

- (44) a. *chī le píngguǒ.
 eat PERF apple
 b. chī le yī ge píngguǒ.
 eat PERF one CL apple
 '(He) ate an apple.'

To explain these facts, Shěn first claims that there is a distinction between boundedness vs unboundedness in human cognition. Objects can show distinction between boundedness and unboundedness in space. This is also the case for events, for which the boundary refers to the temporal structure. For instance, *a chair* will take a certain space with its own boundary, while other objects like *water* do not show such features. Similarly, an action takes some time. An action with both starting and endpoint is bounded, while one without an endpoint is unbounded. For instance, *I ran to school* is bounded; while *I miss my family very much* is unbounded.

This contrast between boundedness and unboundedness in human cognition reflects itself in grammatical structure (Shěn 1995:369). For instance, nouns with numeral, definite articles or proper names are bounded, while others like mass nouns and bare nouns are unbounded. Actions with an inherent endpoint are bounded, and those without are unbounded.

Still, the boundedness of objects corresponds to the boundedness of events (Shěn 1995:373). A bounded object is compatible with a bounded event, and vice versa, a bounded event can only be compatible with bounded objects. In Shěn's analysis, verbs are divided into simple action verbs and eventive verbs. For instance, *wash*, *read*, *watch* etc. are simple action verbs; *verb+resultative complement*, *verb+direction* etc. are eventive predicate.

Shěn (1995) claims that the observed influence of [numeral+classifier] on a grammatical structure in (42) - (44) is in fact the indication of the boundedness vs unboundedness distinction in human cognition in grammatical structure. According to him the ungrammaticality of the sentences in (42a) - (44a) can be accounted for: in these sentences, the boundedness of the objects is incompatible with the eventive predicates. The incompatibility between the verb and the object leads to the ungrammaticality. Note that in his analysis,

[*verb+resultative*], [*complement, verb+tendency verb*] and [*verbal +le*] are eventive predicates, which are bounded themselves (Shěn 1995:371).

Following this notion of boundedness, Lǚ (2010) suggests that ka⁴¹ should not be treated as a perfective marker; rather it can be seen as an Extended Event Boundary marker. The main function of ka⁴¹ is to indicate that an event has been made bounded. Whenever ka⁴¹ appears, it indicates that the event is one with a boundary (see (45)).

- (45) a. tsan³³san³³ k^han⁴⁵ ta²¹ xy³³.
 read PERF book
 'Tsansen read in the book.'
- b. tsan³³san³³ k^han⁴⁵ ka⁴¹ ta²¹ xy³³.
 read KA PERF book
 'Tsansen read the book (finished).'
- c. tsan³³san³³ k^han⁴⁵ ka⁴¹ ta²¹ san³³ pən⁴¹ xy³³.
 read KA PERF three CL book
 'Tsansen read three books (finished).'

In (45a), the event is unbounded and the action is interpreted as being terminated, while in (45b), ka⁴¹ is added, and the event is bounded and the action is interpreted as being completed. In (45c), the object contains a numeral, the event is bounded, ka⁴¹ can still appear. In this analysis, ka⁴¹ functions the same as the numeral in an object, they both make an event bounded. In this sense, ka⁴¹ is seen as an event boundary marker.

Yet different from Shěn, Lǚ uses the notion of boundedness in a more generalized sense by proposing that the notion Extended Event Boundary refers not only to a temporal boundary of an event, but also to elements that are used to specify the degree/measurement of an event. The main reason is that the information provided by these elements also plays the role of what Shěn calls an event boundary, an endpoint. The elements that can help provide an event with a boundary include durative expressions, verbal classifiers etc. The point is that whenever these elements appear, ka⁴¹ can also appear. See (46) - (47).

- (46) a. tsan³³ san³³ k^han⁴¹ ka⁴¹ Li⁴¹ si⁴¹ i²⁴ ɲan⁴¹.
look KA one eye

'Tsansan had a look at Lisi.'

- b. *tsan³³ san³³ k^han⁴¹ ka⁴¹ Li⁴¹ si⁴¹.
look KA

- c. tsan³³ san³³ k^han⁴¹ ta⁴¹ Li⁴¹ si⁴¹.
look PERF

'Tsansan looked at Lisi.'

- (47) a. tsan³³ san³³ p^hao⁴¹ ka⁴¹ san³³ ko³³ ɕiao⁴¹ si²⁴.
run KA three CL hour

'Tsansan has run for three hours.'

- b. *tsan³³ san³³ p^hao⁴¹ ka⁴¹ pu²¹.
run KA step

- c. tsan³³ san³³ p^hao⁴¹ ta²¹ pu²¹.
run PERF step

'Tsansan ran.'

In (46a), the verb *k^han⁴¹* 'look' is an activity predicate and the sentence contains a verbal classifier *i²⁴ ɲan⁴¹* 'one eye'. However if we delete the verbal classifier, the sentence is ungrammatical (47b). The verbal classifier provides a boundary for the event: the event comes to an end after Tsansan had a look at Lisi. Without the verbal classifier, *ka⁴¹* is not acceptable. Note that in the same circumstance, *ta²¹* is acceptable. Similarly, if we leave out the durative adverbial *san³³ ko³³ ɕiao⁴¹ si²⁴* 'three hours' in (47b), the sentence becomes ungrammatical. In Lü's analysis, the verbal classifier *i²⁴ ɲan⁴¹* 'one eye' (46a) and the durative phrase *san³³ ko³³ ɕiao⁴¹ si²⁴* 'three hours' (47a) are used to specify a boundary for the events. The use of *ka⁴¹* in the above can be accounted for using the notion of Extended Event Boundary in the general sense. *ka⁴¹* in these cases is only used to mark these boundaries in an abstract sense.

In the perfective approach, it is assumed that ka^{41} and ta^{21} only differ in the semantic properties of the predicates they attach to (Wǔ 1991, 1994, 1999, 2005, Lǐ 1991, Lú 2007). To be specific, ka^{41} supposedly combines only with verbs with an underlying meaning of *to discard* or *to get away* and the object must be totally affected, consumed or destroyed as in (49) (Wǔ 1991, 1997). In

comparison with *ka*⁴¹, *ta*²¹ tends to be used with verbs which have an underlying meaning of *to obtain*, *to gain*. Compare (49a) and (49b), taken from Wǔ (1999:57).

- (49) a. tsan³³ san³³ mai⁴¹ ka⁴¹ san³³ kən³³ tɕin³³ pin¹³ ko⁴¹.
 buy PERF three kilo apple
 'Tsansan bought three kilos of apples.'
- b. tsan³³ san³³ k^han⁴¹ ta⁴¹ san³³ pən⁴¹ xu³³.
 read PERF three CL book
 'Tsansan read three books.'

According to Wǔ (1999), the verb in (49a) has a meaning of consumption, hence *ka*⁴¹ is acceptable in the sentence as a perfective marker. The sentence indicates that Tsansan has completed the action of buying apples. However, it is not clear in what sense buying is a case of *consumption*. In (49b), the verb is *k^han*⁴¹ 'read', and *ta*²¹ is used. However too, Wǔ does not explain the relation between the action of *k^han*⁴¹ 'read' and the sense of 'obtain'.

Hence it can be seen that Wǔ's generalization that the verbs that *ka*⁴¹ attaches to are those indicating *deletion*, *destruction* and *consumption* is not entirely correct. Furthermore, I observe that *ka*⁴¹ and *ta*²¹ are sometimes interchangeable (only when the object contains a numeral, see (49)); both *ka*⁴¹ and *ta*²¹ can be used and there is no difference in interpretation, although my informants report that *ka*⁴¹ sounds more natural than *ta*²¹ in such cases, regardless of the nature of the verb. The semantics of a verb does not play a big role in distinguishing *ka*⁴¹ from *ta*²¹. What's more, I observe that the verb in (50) can hardly be said to be related to the meaning of *deletion* or *destruction*.

- (50) t^ha³³ u²⁴li t^hɕi⁴¹ {ka⁴¹/ta²¹} i²¹ tən⁴⁵ fan²⁴ tsi²¹.
 3SG family built KA PERF one CL house
 'He has built a house.'

*ka*⁴¹ in (50) follows the verb *t^hɕi*⁴¹ 'to build'. Obviously, the verb does not have the meaning of *deletion* nor *disappearance*. On the contrary, it indicates the

appearance of something new. So the claim that the use of *ka*⁴¹ is related to the semantic properties of the verbs does not seem to be correct.

Wǔ's observation is correct in the sense that *ka*⁴¹ does, in some cases, express the meaning of completion. However, this should not be seen as a reason for treating *ka*⁴¹ as a perfective marker. See (51):

- (51) a. tsan³³ san tɕ^hia²⁴ (*ka⁴¹) pin¹³ko⁴¹.
 eat KA apple
 Intended: 'Tsansan ate apple(s).'
- b. tsan³³ san tɕ^hia²⁴ {ta²¹/ *ka⁴¹} la⁴⁵ tsa³⁴ pin¹³ko⁴¹.
 eat PERF/ KA that CL apple
 'Tsansan ate that apple.'
 'Tsansan finished that apple.'
- c. tsan³³ san tɕ^hia²⁴ ka⁴¹ pin¹³ko⁴¹ ta²¹.
 eat KA apple PERF
 'Tsansan has finished eating the apple(s).'

In (51a) - (51b) the same verb is used and in (51a) the object is a bare noun, and in (51b) the object contains a demonstrative. In these two sentences, *ka*⁴¹ cannot be used. So if *ka*⁴¹ is a perfective marker, it is not clear why (51a) - (51b) with *ka*⁴¹ are ungrammatical, especially because we have a verb with the meaning of consumption, so it is the right type of verb according to Wǔ's criteria. Wǔ (1999) points out that *ka*⁴¹ is a perfective marker indicating the completion of an action, under the condition that the sentence must have a quantized object. That would, however, make *ka*⁴¹ a very special aspect marker, if it is sensitive to the nature of the object. Smith (1997) points out that generally any eventive predicates can be presented in the perfective, and (51b) shows that this sentence is not an exception: with *ta*²¹ it is grammatical. We may assume that *ka*⁴¹ is a special perfective marker. But that will be too ad hoc.

Similarly, a sentence like (52a) can be made grammatical by adding the adverb *ts^hai¹³* 'just'.

- (52) a. *tsan³³ san³³ mai⁴¹ ka⁴¹ pin¹³ ko⁴¹.
 buy KA apple
 b. tsan³³ san³³ ts^hai¹³ mai⁴¹ ka⁴¹ pin¹³ ko⁴¹.
 just buy KA apple
 'Tsansan has just bought (some) apples.'

*ka*⁴¹ in (52a) is unacceptable, but it is acceptable in (52b). The only difference between the two sentences is that in the latter, the adverb *ts^hai¹³* 'just' has been added. The examples in (51) - (52) show that *ka*⁴¹ is sensitive not only to the properties of the object but also to other things, such as the presence of *ta*²¹ or the adverb *ts^hai¹³* 'just'. So treating *ka*⁴¹ as a perfective marker just as *ta*²¹ requires further consideration. (As mentioned, I return to these sentences in section 3.8.)

In what follows I present some further observations that show that *ka*⁴¹ should not be treated in the same way as *ta*²¹, a perfective marker.

The first observation is related to one of the prominent properties of Chángshā. That is, as we have discussed at length above, in achievements (53), change-of-state predicates (54) and in *BA*-sentences (55) in the perfective, *ka*⁴¹ and *ta*²¹ are both required to appear. We saw many examples already; here are some more:

- (53) a. *tsan³³ san³³ tau⁴¹ ka⁴¹/ ta²¹.
 arrive KA PERF
 b. tsan³³ san³³ tau⁴¹ ka⁴¹ ta²¹.
 arrive KA PERF
 'Tsansan has arrived.'

- (54) a. *t^hian³³ tɕi⁴¹ lən⁴¹ ka⁴¹/ ta²¹.
 weather cold KA / PERF
 b. t^hian³³ tɕi⁴¹ lən⁴¹ ka⁴¹ ta²¹.
 weather cold KA PERF
 'It turned cold.'

- (55) a. *ŋo⁴¹ pa⁴¹ i³³fu ɕi⁴¹ ka⁴¹/ta²¹.
 1SG BA clothes wash KA / PERF
 b. ŋo⁴¹ pa⁴¹ i³³fu ɕi⁴¹ ka⁴¹ ta²¹.
 1SG BA clothes wash KA PERF
 'I have washed the clothes.'

In these sentences, both ka⁴¹ and ta²¹ are obligatory, which is unexpected if ka⁴¹ and ta²¹ are both perfective markers.

My second observation is related to negative sentences. As we already saw in the previous chapter, in Chángshā, the negative particle mau²¹ is like the negative marker *mǎ* (yǒu) 'not (have)' in Mandarin, in which capacity it never co-occurs with perfective marker ta²¹ (because it is supposed to be a perfective marker itself; see chapter 2 above for more details). Mau²¹ is, however, compatible with ka⁴¹:

- (56) tsan³³ san³³ mau²¹ k^han⁴⁵ ka⁴¹/*ta²¹ san³³ pən⁴¹ xu³³.
 NEG read KA/ PERF three CL book
 'Tsansen has not finished reading three books.'

- (57) tsan³³ san³³ mau²¹ ɕi⁴¹ ka⁴¹/*ta²¹ i³³fu²⁴.
 NEG wash KA / PERF clothes
 'Tsansen did not finish washing his clothes.'

If mau²¹ is incompatible with ta²¹ because ta²¹ is a perfective marker, it is not clear why it is compatible with ka⁴¹ if that is also a perfective marker. One possible explanation is that ka⁴¹ is not a perfective aspect marker, while ta²¹ is.

To sum up, the above facts show that ta²¹ is acceptable as a way of expressing the perfective, while ka⁴¹ is not. Therefore, basing myself on the above observations, I conclude that ka⁴¹ and ta²¹ should be treated differently. ka⁴¹ should not be treated as a perfective marker. In the following, I point out that it is also not sufficient to treat ka⁴¹ as an Extended Event Boundary marker.

3.4.2 *ka*⁴¹ is not an "Extended Event Boundary" marker

As we saw, noticing the distribution and interpretational properties of *ka*⁴¹, Lǚ (2010) proposed that *ka*⁴¹ should not be treated as a perfective marker, but that it should be seen as an Extended Event Boundary marker instead. By Extended Event Boundary, Lǚ referred both to the boundary as an inherent property of events and to the temporal boundary provided externally. The boundary can be specified by the information from an argument (i.e. an object with a numeral), a measuring phrase, a durative phrase or something else.

Yet this approach also leaves many questions unanswered. For example, the relation between *ka*⁴¹ and the Extended Event Boundary is unclear. It is not clear whether the event boundary licenses the use of *ka*⁴¹, or whether *ka*⁴¹ marks the Extended Event Boundary, since in some cases, *ka*⁴¹ seems to accompany elements which are considered to be event boundaries, while in some other cases, *ka*⁴¹ seems to provide an event with an event boundary. Relevant examples are repeated in (58).

- (58) a. tsan³³ san³³ k^han⁴⁵ ka⁴¹ san³³ pən⁴¹ xu³³.
 read KA three CL book
 'Tsansan read three books (finished).'
- b. *tsan³³ san³³ k^han⁴⁵ ka⁴¹ xu³³.
 read KA book
- c. tsan³³ san³³ k^han⁴⁵ ka⁴¹ ta²¹ xu³³.
 read KA PERF book
 'Tsansan read the book (finished).'

In (58a), there is an inherent boundary, *ka*⁴¹ can be used, in (58b) the object is a bare noun, *ka*⁴¹ is excluded, while when in the same case the perfective marker *ta*²¹ is used, *ka*⁴¹ becomes acceptable (58c). If *ka*⁴¹ is used to mark an Extended Event Boundary, it is not clear what *ka*⁴¹ does in (58a) where there is already an inherent boundary.

Secondly, Lǚ's notion of Extended Event Boundary marker is too language specific and it is anyhow not clear why we need such a marker in the structure.

Finally, by treating ka^{41} as an Extend Event Boundary, the relation between ka^{41} and ta^{21} is still confusing, since there are cases in which ka^{41} does seem to function as a perfective marker. For example, in (58a), ka^{41} can stand alone. Therefore, the ambiguity of the status of ka^{41} needs further clarification. The rest of this chapter will go into questions like these.

3.4.3 Summary

In section 3.4, I have reviewed the previous analyses of the use of ka^{41} . I argued that ka^{41} should not be treated as a perfective marker because the analyses cannot account for the fact that ka^{41} is only accepted in activities, achievements and accomplishments under certain conditions, while ta^{21} is acceptable without these conditions. I also mentioned that it is not explanatory to call ka^{41} an Extended Event Boundary marker. In the rest of this chapter, we will provide a new analysis of ka^{41} which does justice to all its properties.

3.5 Interpreting ka^{41} : ka^{41} doubles an endpoint

In this section, I re-examine the semantic interpretation of ka^{41} before I propose a new analysis. I point out that ka^{41} is used to double an endpoint that is already there and that its function is to mark the existing endpoint as definitive and absolute. As such it shields the process preceding the endpoint from being available for syntactic operations. I will develop this analysis in reference to the inner aspect structure introduced and discussed in chapters 1 and 2. We start out from looking at contexts in which ka^{41} is obligatory.

3.5.1 Interpreting ka^{41} in achievements

We have seen in section 3.2.1.1 that ka^{41} is obligatory in achievements. Not having ka^{41} will cause ungrammaticality. The property of an achievement is that it represents a spontaneous transition between states (Vendler 1967, Dowty 1979, Smith 1997, Rothstein 2004). Achievements are lexically

endowed with an inherent endpoint. Mandarin achievements, here in the perfective, are illustrated in (59).

- (59) a. Zhāngsān zǒu le.
 leave PERF
 'Zhansan left.'
- b. bēizi pò le.
 cup break PERF
 'The cup broke.'
- c. zhè chǎng bǐsài Zhāngsān yíng le.
 DEM CL match win PERF
 'Zhangsan won the match.'
- d. chuán fān le
 boat turnover PERF
 'The boat turned over.'

Sentences (59a) - (59d) are expressions of achievements in the perfective in Mandarin, marked by perfective marker *le*. In Chángshā, however, in the same contexts, we see that, in addition to the element which we recognized as the perfective marker in the previous chapter, *ta*²¹, we have an extra element, *ka*⁴¹; the lack of *ka*⁴¹ leads to ungrammaticality. The counterpart of (59) is in (60) in Chángshā.

- (60) a. tsan³³san³³ tsou⁴⁵ {ka⁴¹ta²¹/ *ka⁴¹/ *ta²¹}.
 leave KA PERF
- b. pei³³tsi p^ho⁴⁵ {ka⁴¹ta²¹/ *ka⁴¹/ *ta²¹}.
 cup break KA PERF
 'The cup has broken.'
- c. tsə⁴¹tsan¹³ pi²¹sai⁴¹ Tsan³³san³³ in¹³ {ka⁴¹ta²¹/ *ka⁴¹/ *ta²¹}
 DEM CL match win KA PERF
 'Tsansan won the match.'
- d. tɕuan¹³fan³³ {ka⁴¹ta²¹/ *ka⁴¹/ *ta²¹}
 boat turn over KA PERF
 'The boat turned over.'

The sentences in (60) show that *ka*⁴¹ is obligatory when the achievement verbs are presented in the perfective; neither *ka*⁴¹ nor *ta*²¹ can stand alone in the sentence. So, with *ta*²¹ as the perfective marker in this language, what is the function of *ka*⁴¹ in achievements?

As just mentioned, an achievement is inherently endowed with an endpoint (Vendler 1957, 1967, Krifka 1998, Rothstein 2004, among others). It indicates an instant change of state. Given the observation that *ka*⁴¹ is always obligatory in achievements, there are two possibilities to account for the distribution of *ka*⁴¹. On the one hand, we might argue that the endpoint reading in achievements in Chángshā is only implied and that *ka*⁴¹ is used to make it explicit. On the other hand, we can also assume that Chángshā is like other languages in that achievements inherently entail an endpoint. This is a common property of achievements, and Chángshā is then assumed not to be an exception. What is different is that another element, *ka*⁴¹ is needed to double the inherent endpoint of an achievement in Chángshā.

We take the first case first. That is, if we assume that achievements in Chángshā are different from those in other languages in the sense that the endpoint is only implied, we predict that we should be able to cancel it, because implied endpoints normally are. We should for instance, be able to express an achievement in the progressive. However, this prediction is not borne out. For example, we cannot utter (61).

- (61) a. *pəi³³ tsi tsən⁴⁵ tsai²¹ko²⁴ p^ho⁴⁵.
 cup right now PROG break
 Intended: 'The cup is breaking right now.'
 b. *tsan³³san³³ tsən⁴⁵ tsai²¹ko²⁴ lai¹³.
 right now PROG come
 Intended: 'Tsansan is coming right now.'

The verbs *p^ho*⁴⁵ 'break' and *lai*¹³ 'come' in (61) are achievements. If we assume that their inherent endpoints can be cancelled, the ungrammaticality of (61a) and (61b) is unexpected, since an implication can be cancelled and such form should be compatible with the progressive (as we know from the behavior of accomplishments), which it is not. The ungrammaticality of (61a) and (61b)

shows that the endpoint in achievements in Chángshā cannot be cancelled. We can also test this by conjoining a sentence containing such a verb with a negative sentence. See (62).

- (62) a. *tsan³³ san³³ lai¹³ ka⁴¹ ta²¹, ko⁴¹ shi xai¹³ mau²¹ tau⁴¹.
 come KA PERF but yet NEG arrive
 Intended: 'Tsangsan has come, but he did not arrive yet.'
- b. *la⁴⁵ tən⁴⁵ fan¹³ tsi k^hua⁴¹ ka⁴¹ ta²¹, ko⁴¹ shi xai¹³
 DEM CL house fall KA PERF, but yet
 mau²¹ k^hua⁴¹ xia²¹ kə⁴⁵.
 NEG fall down go
 Intended: 'That house fell, but did not fall down.'

In (62a) - (62b), the conjunction with the construction negating the completion of the action is not acceptable. This shows that the endpoint in achievements is entailed, and not just implied. After all, implications are cancellable; entailments are not.

Given that the endpoint in achievements in Chángshā cannot be an implication, as we have just seen, we are forced to choose the other possibility, namely that the endpoint (here change of state) in an achievement is inherent, just as in other languages. We suggest that what differentiates Chángshā from some other languages is that in the former, apart from an inherent endpoint we still need another element: the inherent endpoint is doubled. *ka*⁴¹ is such an element. *ka*⁴¹ indicates that the endpoint is definitely there.

We conclude that *ka*⁴¹ is required by the verb, but strictly speaking, since so far we have only seen that *ka*⁴¹ in perfective sentences, co-occurring with *ta*²¹, it is thus possible that the properties of *ta*²¹ require the presence of *ka*⁴¹ to express an achievement in the perfective. However, this is not the case. First, I showed in chapter 2 that *ta*²¹ is a perfective marker, just like *le* in Mandarin, and I also showed that *ta*²¹ can be used to indicate that an event has been completed when the object in an accomplishment contains a numeral. We have seen (63), I repeat it here for convenience ((63b) is Mandarin).

- (63) a. t^ha³³ tɕia²⁴ ta²¹ san³³ tsa²⁴ pin¹³ko²⁴.
 3SG eat PERF three CL apple
 'He ate three apples up.'
- b. tā chī le sān ge píngguǒ.
 3SG eat PERF three CL apple
 'He ate three apples.'

The object in (63a) contains a numeral, and *ta*²¹ expresses completion, (63b) is the counterpart of (63a) in Mandarin. This shows that *ta*²¹ can by itself indicate the completion of an action when the endpoint is available in the event, without requiring the presence of *ka*⁴¹. So if it is not *ta*²¹ which requires *ka*⁴¹, it must be the achievement verb. One may be wondering if achievements should always co-occur with *ka*⁴¹. They do when reference is made to a specific event, like in "He arrives tomorrow". In these cases *ka*⁴¹ is obligatory. When that is not the case, like in "He always wins", see (64d), we do not have *ka*⁴¹.

- (64) a. t^ha³³ tso¹³tian³³ in¹³ *(ka⁴¹) ta²¹.
 3SG yesterday win KA PERF
 'He won yesterday.'
- b. t^ha³³ min¹³tian³³ tɕiu²¹ tau⁴⁵ *(ka⁴¹) ta²¹.
 3SG tomorrow just arrive KA PERF
 'He is just arriving tomorrow.'
- c. mɛi⁴¹thsi⁴⁵ tou³³ si²¹ tsansan in¹³ *(ka⁴¹) ta²¹.
 everytime all be win KA PERF
 'Everytime it is Zhangsan who wins.'
- d. t^ha³³ tsən⁴¹ si²¹ in¹³.
 3SG always win
 'He always wins.'

This is also confirmed by the examples we saw in section 3.2.1.1, one of which is repeated here as (65), which show that an achievement predicate needs *ka*⁴¹, even when it is not in the perfective.

- (65) la⁴⁵ tsa²⁴ niao⁴¹ kan⁴⁵ian²¹tsi i²⁴-tin²¹xui²¹ ɕi⁴¹ ka⁴¹.
 DEM CL bird from.the.look.of.it be sure die KA
 'The bird seems to be sure to die.'

What we observe is that achievements are verbs with an endpoint and that whenever we have an achievement, *ka*⁴¹ also appears. There seems to be a relation between telicity and the appearance of *ka*⁴¹. Note that in the same cases in Mandarin, no extra element is needed: (65) can be said in Mandarin as (66):

- (66) nǐ zhi niǎo kàn yàngzi / yǐng huì sǐ.
 DEM CL bird from.the.look.of.it/be sure will die
 'That bird looked as if it will die.'

I will now turn to *ka*⁴¹ used with statives turned into change-of-state predicates.

3.5.2 Interpreting *ka*⁴¹ in stative predicates

As shown in section 3.2.4, *ka*⁴¹ appears with a stative verb in combination with perfective marker *ta*²¹. As we noted, in these contexts, stative predicates get a change of state reading. This can be seen in (67) - (68).

- (67) a. *xua³³ xǒ¹³ ta²¹.
 flower red PERF
 b. xua³³ xǒ¹³ ka⁴¹ ta²¹.
 flower red KA PERF
 'The flowers have become red.'
- (68) a. *t^ha³³ sou⁴⁵ ta²¹.
 3SG thin PERF
 b. t^ha³³ sou⁴⁵ ka⁴¹ ta²¹.
 3SG thin KA PERF
 'He has become thin.'

Note that this pattern is only observed with stage-level predicates in the sense of Carlson (1977). Individual-level predicates do not behave this way. For example, you cannot say (69):

- Intended: 'Tsansan has become intelligent.'

(70) huā hóng le.
flower red PERF
'The flowers have become red.'

- As indicated in (70) - (71), in Mandarin, these sentences appear with perfective marker *le*. These sentences also have a change-of-state reading. However, what is different is that in Mandarin the stative predicates in the perfective do not need any extra elements. Schematically, we have the following situation in Chángshā and Mandarin:

- (72) a. stative predicate + *ka*⁴¹ + *ta*²¹ → change of state reading
 b. stative predicate + *le* → change of state reading

If Mandarin can do it with the perfective marker alone, what is *ka*⁴¹ in Chángshā?

Before we deal with the differences between these two languages, we first see how we can explain the case of statives in the perfective with a change of state reading, in addition to the reference to Huang (2017) given above.

Change of state readings arising from the combination of the perfective aspect and a stative verbs are not unknown. Chung and Timberlake (1985:217), Comrie (1976:19), Moens and Steedman (1988), Jackendoff (1997), Pustejovsky (1995), Krifka (1998), de Swart (1998, 2000), Bonami (2007) and Flouraki (2006) among others have reported such cases. Many languages like Russian and Modern Greek are said to exhibit such phenomena. Some sentences are used in the following for illustration.

(73) Russian

Imperfective		perfective	
ponimat'	'understand'	ponjat	'come to understand'
verit'	'believe'	poverit'	'come to believe'
lubit'	'love'	polubit'	'come to love'

(74) Modern Greek

- a. O Giannis agapouse ti Maria.
 The Giannis loved. IMPERF.3sg the Maria
 'The Giannis loved/used to love Maria' (basic meaning)
- b. O Giannis agapise ti Maria.
 The Giannis loved. PERF.3sg the Maria
 'The Giannis fell in love with Maria' (inchoative meaning)

(73) - (74) show that a state gets a basic interpretation when combined with the imperfective aspect, and an inchoative meaning when combined with the perfective aspect.

To explain why a perfective aspect marker can be used to express a change of state reading in stage-level predicates, Comrie (1976:20) states that:

There may be some sense in saying that since states are less likely to be described by perfective forms than are events (including entries into states), then there is some functional value in utilising the perfective forms of stative verbs to denote the event of entry into the appropriate state, since otherwise there would be little use for the perfective forms of these verbs.

Based on Comrie (1976), we may assume that these so-called stative verbs are actually not stative at all: they are used to express a process of becoming *x*, and it is this process that has an endpoint. In other words, the statives we are mentioning here are in fact change-of-state verbs, rather than general stative verbs. That is why (70) - (71) can have a change of state reading. This is possible, since in Mandarin there is no morphological difference between adjectives and verbs. An adjective can be used as a predicate without a copular verb. The same is true in Chángshā. If that is the case, then the use of *ka*⁴¹ with such stative predicates is like its use in other cases that we have reviewed where we found, on independent grounds, that they involved an inherent endpoint, like with achievements and in *BA*- sentences, that is, it is used to double the endpoint.

Before I close this section, I would like to introduce some other analyses about the use of *le* with statives in Mandarin. I will focus on Lín (2004) and point out that Lín's analysis can help me support my interpretation of *ka*⁴¹.

That aspect marker *le* can occur with certain stative verbs in Mandarin has been analyzed in many different ways. For convenience, I repeat (70) - (71) in (75) - (76).

- (75) huā hóng le.
 flower red PERF
 'The flowers have become red.'

- (76) tā shòu le.
 3SG thin PERF
 'He has become thin.'

(75) - (76) show that two stative verbs, *hóng* 'red' and *shòu* 'thin', appearing in the perfective, and the sentences acquire a change-of-state reading. To explain the use of the perfective marker *le*, Cháo (1968:699) proposes, "It implies a change from a different previous condition". Similarly, Cháng (2003) proposes that aspect marker *le*, when occurring with a stage-level predicate, is able to evoke a boundary (i.e., the beginning of a situation). Cháng mainly bases his analysis on Talmy (1988) and Smith (1997), who claim that the adverbial *chà bù duō/jīhū* 'almost' occurs in an environment with a designated boundary (an endpoint). Cháng observes that a stative predicate with *le* can be modified by the adverbial *chà bù duō/jīhū* 'almost'. He argues that the adverb in the sentence can refer to the boundary evoked by *le*.

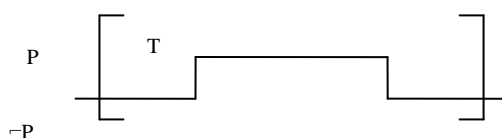
Li & Thompson (1981:188) claim that *le* suggests a bounded situation. They hold that "it links a change of state and the pre-inceptive situation into succession, converting a state verb into an achievement verb". In line with Li & Thompson (1981), Smith (1997:286) holds that *le* changes a stative verb into an activity verb, but no implementation of the process of changing has been provided by Smith (1997).

From the above, it can be seen that Cháo (1968), Li & Thompson (1981) and Smith (1997) share the idea that verb *le* is related to a change of state reading, but differ in the origin of the change of state reading. *le* implies or evokes a change of state reading as is suggested by Cháo (1968), or changes a state into an achievement verb as is suggested by Li & Thompson (1981) and Smith (1997). Yet the two approaches are not satisfactory. For example, for the "evoking" approach, it is not clear why the perfective *le* is able to evoke a boundary only in stative predicates, but not in other cases. For the "converting" approach, it is not clear how *le* as a perfective marker can change a stative into an achievement.

Different from the above, Lín (2004) makes the relation between the perfective and the "evoked boundary" in stative predicates more apparent. In dealing with "perfective statives" in Mandarin, Lín (2004:86) proposes that there is a covert inchoative verbalizing head v_0 that gives rise to the change of state

reading. With this functional element in place, the perfective aspect behaves according to the standard definition: it indicates the endpoint has been reached. Or, in Lin's terms, it indicates the temporal configuration in which situation time (the transition from $\neg P$ to P) is contained in topic time. The time-course diagram in (77) captures the interpretation of a stative verb viewed perfectly (from Lín 2004:85).

(77)



In short, Lín's analysis assumes that the change of state reading in stative predicates in the perfective in Mandarin comes from a covert inchoative verbalizing head v_8 .

In line with Lin's analysis, I further point out that we can in fact observe that the covert verbalizing head can sometimes be lexically realized by the verb *biàn* 'become'.

- (78) a. huā hóng le.
 flower red PERF
 'The flowers have become red.'
- b. huā biàn hóng le.
 flower become red PERF
 'The flowers have become red.'

- (79) a. tā shòu le.
 3SG thin PERF
 'He has become thin.'
- b. tā biàn shòu le.
 3SG become thin PERF
 'He has become thin.'

In (78b) - (79b), the verb *biàn* ‘become’ is added without leading to a difference in interpretation. These sentences show that it makes sense to assume a verbal element indicating the change of state reading in statives when presented in the perfective. In what follows, I show that this analysis of statives in the perfective can also find support from lexical morphology indicating a change of state reading.

To start, I would like to point out that the analyses so far center on the observation that a change of state reading arises in a stative predicate in the perfective in different languages. What these languages share is that the reading arises when the stative predicates are in the perfective. The reading of change of state is indicated by a syntactic element overt or non-overt in these languages. However, in the following we are going to see that in some other languages the change of state reading with stative predicates shows close morphological relation with the corresponding property denoting adjectives. The following examples are used for illustration.

(80) English (Koontz-Garboden 2005:188)

- a. The knot is loose. (ADJECTIVE)
- b. The knot is loosened. (NON-CAUSATIVE COS (CHANGE OF STATE))
- c. Alex loosened the knot. (CAUSATIVE COS)

(81) O’odham (Hale and Keyser 1998:92)

	ADJECTIVE	NON-CAUSATIVE COS	CAUSATIVE	COS
a.	(s-)weg	weg-i	weg-i-(ji)d	‘red’
b.	(s-)moik	moik-a	moik-a-(ji)d	‘soft’
c.	(s-)'oam	'oam-a	'oam-a-(ji)d	‘yellow’

(82) Warlpiri (Hale & Keyser 1998:93)

	ADJECTIVE	NON-CAUSATIVE COS	CAUSATIVE COS
a.	wiri	wiri-jarri-	wiri-ma ‘big’
b.	maju	maju-jarri-	maju-ma- ‘bad’

The data in (80) - (82) show that in English, O’odham and Warlpiri, words denoting property concept states and their related changes of state are not

morphologically identical, although they share the same root. Koontz-Garboden suggests that in these languages, a verb denoting a change of state is derived from the property concept denoting adjective/noun by way of some kind of morphological process (for more details, see Koontz-Garboden 2005). (79) - (81) show the change of state reading with stative predicate may be realized in the form of affixes.

To sum up, in the above I have introduced two approaches dealing with the change of state reading produced by stative predicates. In Lín (2004), a non-overt verbalized head expresses the change of state reading. In Koontz-Garboden (2005), the change of state reading in some languages is derived from the property denoting adjectives through a morphological process. The above discussion show that the ways expressing a change of state reading vary. It can be done syntactically by a syntactic head, which may be overt or non-overt. It can also be done through a morphological process. For convenience, I present the two ways indicating the change of state meaning in different languages in Table 1.

Table 1 Ways indicating a change of state reading with a stative predicate

Ways of expressing a change of state reading	Languages	Morphology
Syntactic encoding	Mandarin/ Chángshā	∅
Morphological process	English	-en

Table 1 shows that languages may use different ways to express the change of state reading with a stative predicate presented in the perfective. It may be done through a morphological process in languages like English. It may also be done by a syntactic process in which an overt/non-overt element is part of the syntactic structure in languages like Mandarin and Chángshā. For instance in Mandarin, usually a covert element is used, though in some cases, the covert form can be realized in the form of the lexical verb *biàn* 'change'; while in Chángshā, it is always realized with *ka*⁴¹.

With the above analysis, we can now rewrite (72b) in (83).

(83) stative predicate + ∅ + *le* → change of state reading

(83) shows that in Mandarin, there is a covert element in a stative presented in the perfective. Let us assume that this is the element that is responsible for the change of state reading. Moving to Chángshā we can, in view of (75a) then take it that ka⁴¹ then is an overt element that is responsible for turning states into change-of-state predicates. We rewrite (72) in (84).

- (84) a. stative predicate + ka⁴¹ + ta²¹ → change of state reading
 b. stative predicate + ∅ + le → change of state reading

However enticing it may be to analyze ka⁴¹ as a syntactic or morphological element that changes a state into a change-of-state predicate, it turns out that, on closer consideration, it does not hold water. First, we find that ka⁴¹ and the element *biàn* 'become' (*pian*⁴⁵ in Chángshā) which we introduced as the verbalizing head in Mandarin above can appear in Chángshā. (67) - (68) are rewritten in Chángshā in (85) - (86).

- (85) a. *xua³³ xǎ¹³ ta²¹.
 flower red PERF
 b. xua³³ xǎ¹³ ka⁴¹ ta²¹.
 flower red KA PERF
 'The flowers have become red.'
 c. xua³³ pian⁴⁵ xǎ¹³ ta²¹.
 flower become red PERF
 'The flowers have become red.'

- (86) a. *t^ha³³ sou⁴⁵ ta²¹.
 3SG thin PERF
 b. t^ha³³ sou⁴⁵ ka⁴¹ ta²¹.
 3SG thin KA PERF
 'He has become thin.'
 c. t^ha³³ pian⁴⁵ ka⁴¹ sou⁴⁵ ta²¹.
 3SG become KA thin PERF
 'He has become thin.'

In (85b) *ka*⁴¹ is used, and in (85c) the verb *pian*⁴⁵ 'become' is used, the two sentences have the same interpretation. The same is true in (86). This shows that *ka*⁴¹ is not the realization of the covert verbalizing head. What's more, the fact that *ka*⁴¹ and *pian*⁴⁵ can co-occur further supports the idea that *ka*⁴¹ should not be seen as the lexical realization of the covert verbalizing head.

- (87) a. xua³³ pian⁴⁵ xǔ¹³ ka⁴¹ ta²¹.
 flower change red KA PERF
 'The flowers have turned red.'
 b. t^ha³³ pian⁴⁵ shou⁴⁵ ka⁴¹ ta²¹.
 3SG become thin KA PERF
 'He has become thin.'

In (87), both *ka*⁴¹ and *pian*⁴⁵ 'become' are used, with no consequences for the interpretation. All these cases show that *ka*⁴¹ should not be seen as the overt realization of the verbalizing head.

On the basis of this discussion, we are now ready to provide an answer to the use of *ka*⁴¹ in these change-of-state cases. As in the other cases with an inherent endpoint, such as the achievements we discussed above and the *BA*-sentences to be discussed below, *ka*⁴¹ is used in these change-of-state predicates just to double the endpoint. The question why exactly it does so will be answered shortly.

Note also that, just like with achievements, *ka*⁴¹ does not only show up with change-of-state predicates in the perfective. When we embed such a predicate under a modal, *ka*⁴¹ is preferably present as well.

- (88) a. li⁴¹ tsai⁴⁵ xo²⁴ tixua²¹ xui²¹ tse⁴⁵ ka⁴¹.
 2SG again drink if will drunk KA
 'If you continue to drink more, you are bound get drunk.'
 b. ??li⁴¹ tsai⁴⁵ xo²⁴ tixua²¹ xui²¹ tse⁴⁵.
 2SG again drink if will drunk
 'If you continue to drink more, you may get drunk.'

Although (88b) is not completely ungrammatical, (88a), with ka⁴¹ is clearly preferred.

If these conclusions are right, I can provide an answer to the differences between Mandarin and Chángshā. In both languages, the change of state reading with a stative predicate in the perfective comes from an inchoative verbalizing head. The difference between the two languages lies in the fact that in Chángshā there is an extra element, ka⁴¹, to double the endpoint, while in Mandarin there isn't. Given this consideration, we modify (84) and rewrite it in (89) (order of the different elements is irrelevant).

- (89) a. stative predicate + \emptyset +ka⁴¹+ta²¹ → change of state reading (Chángshā)
 b. stative predicate + \emptyset + \emptyset +le → change of state reading (Mandarin)

(89) shows in both Mandarin and Chángshā there is a covert element, an inchoative verbalizing head v₈ in terms of Lín (2004), in a stative predicate. When it is presented in the perfective, the event gets a change of state reading. What is different between these two languages is that in Chángshā, there is still another particle, ka⁴¹, which is used to double the endpoint.

In what follows, I provide an analysis of the interpretation of ka⁴¹ in the BA-construction. I will show that the function of ka⁴¹ to double an endpoint can also be identified in the BA-construction.

3.5.3 Interpreting ka⁴¹ in the BA-constructions

As we noted above (section 3.2.1.3), ka⁴¹ is obligatory in BA-sentences; the omission of ka⁴¹ makes the sentence ungrammatical.

- (90) a. *ŋo⁴¹ pa⁴¹ i³³fu ɕi⁴¹ ta²¹.
 1SG BA clothes wash PERF
 b. ŋo⁴¹ pa⁴¹ i³³fu ɕi⁴¹ ka⁴¹ ta²¹.
 1SG BA clothes wash KA PERF
 'I washed the clothes.'

- (91) a. *tsan³³ san³³ pa⁴¹ la⁵⁴ pən⁴¹ xy³³ k^han⁵⁴ ta²¹.
 BA DEM CL book read PERF

- b. tsan³³ san³³ pa⁴¹ la⁵⁴ pən⁴¹ xy³³ k^han⁵⁴ ka⁴¹ ta²¹.
 BA DEM CL book read KA PERF
 'Tsansan read that book.'

In sentences (90) - (91), we see that without *ka*⁴¹ the sentence is ungrammatical, while in Mandarin no extra particle is required in such sentences. Note that in Mandarin, *wán* 'done, finish' can, but does not have to, appear: in Mandarin, the perfective marker *le* can do the job alone. We can compare the sentences in (90a) - (91a) with those in (92) from Mandarin.

- (92) a. wǒ bǎ yīfu xǐ le.
 1SG BA clothes wash PERF
 'I washed the clothes.'
 b. wǒ bǎ nà běn shū kàn le.
 1SG BA that CL book read PERF
 'I read that book.'

In (92), the two *BA*-sentences are presented in the perfective marked by *le*. In comparison with Mandarin, we see that in similar cases, Chángshā requires one more particle. So in what respects are Mandarin and Chángshā *BA*-sentences different? Do *BA*-sentences in these languages have different properties? Are the perfective markers different? Or is something else going on?

On the basis of what we discussed in the previous chapter and the preceding paragraphs of this chapter, it is unlikely that the perfective markers in these two languages are different. As we saw, just like Chángshā *ta*²¹, verbal *le* is a perfective marker in the sense that it provides a termination/completion reading. That is, in a telic event, *le* indicates the completion of the action, whereas in an atelic event it refers to the termination of the action (see Li and Thompson 1981, Ross 1995, Smith 1997 and Soh & Kuo 2007; and chapter 2 above).

To have a better overview of the problems we are now facing, I show the surface patterns of perfective non-*BA*-sentences and the corresponding *BA*-sentences in these two languages respectively in (93) - (94):

- (93) non-*BA*-construction and *BA*-construction in Chángshā
- [V + (*ka*⁴¹) + *ta*²¹ + definite NP]
 - [BA + definite NP + V + *ka*⁴¹ + *ta*²¹]
- (94) non-*BA*-construction and *BA*-construction in Mandarin
- [V + *le* + definite NP]
 - [BA + definite NP + V + *le*].

The pattern in (93a) - (94a) shows that the perfective aspect in these two languages is expressed by *ta*²¹ and *le* respectively. However, if it is the *BA*-construction, in Mandarin, we can make do with perfective marker *le* alone, while in Chángshā, next to perfective marker *ta*²¹, we also need *ka*⁴¹. So, looking at the surface orders in (93) - (94), we actually have two questions to answer. The first is why Mandarin and Chángshā are different, the second is why *ka*⁴¹ is obligatory in a *BA*-sentence while it is optional in a non-*BA*-sentence. As to the latter point, we will see that the difference is actually only apparent.

To answer these questions, we need to first consider what properties the *BA*-construction has that make the use of *ka*⁴¹ obligatory.

In what follows, we take as our point of departure the idea that the *BA*-construction contains an inherent endpoint. This idea is basic to most analyses of the *BA*-construction. It is most explicitly expressed in the Sybesma (1992, 1999) where the point is made that the NP following *BA* always originates as the subject of a resultative, that is, an endpoint denoting element. According to Sybesma (1999), every *BA*-sentence contains an endpoint, without an endpoint, no *BA*-sentence can be formed. This can be seen from the different interpretations in (95), where (95a) is a non-*BA*-sentence, while (95b) is a *BA*-sentence.

- (95) a. tā kàn le nǎ běn shū.
 3SG read PERF that CL book
 (i) 'He read in that book.'
 (ii) 'He read that book (finished it).'

b. tā bǎ nà běn shū kàn le.
 3SG BA that CL book read PERF
 'He read that book (finished).'

The sentence in (95a) is ambiguous: it has either a termination reading or a completion reading. In (95), on the other hand, the sentence can only have a completion reading. The immediate question is why (95a) is ambiguous while (95b) is not? This is because, according to Sybesma (1999), (95) corresponds to a single underlying structure and (95a) corresponds to two underlying structures, one of which is the same as that of (95b). In his analysis, the *BA*-NP and the result denoting element together form a small clause which as a whole denotes the state that is the result of the action denoted by the main verb. As a result, by definition, there is no *BA*-sentence without a result or endpoint denoting element. The schema is presented in (96); in all schemas below, we disregard the perfective markers and base order issues are irrelevant (I will discuss them below, when we relate these structures to the tree structure introduced in chapters 1 and 2).

(96) Subj BA Obj_i V [_i R]

In (96), a result denoting small clause follows the verb. It consists of a predicate (“R” from “result”) and its subject (in (96) this subject is referred to as “Obj” because it is interpreted as the object of the verbal complex as a whole). As the trace indicates, the *BA*-NP moves away from the place it is generated to a position where it can be licensed (see Sybesma 1999 for details). Importantly, the R can in some cases be empty. For instance, (97) corresponds to the structure in (98).

(97) wǒ bǎ zhè běn shū kàn le.
 1SG BA that CL book read PERF
 'I read the book.'

(98) wǒ bǎ [zhè běn shū]_i kàn [_i Ø] le.
 1SG BA this CL book read PERF

What's more, the sentence in (97) with the underlying structure in (98) has virtually the same meaning as (99a), based on (98), with an overt counterpart of \emptyset *wán* 'done, finish':

- (99) a. wǒ bǎ zhè běn shū kàn wán le.
 1SG BA this CL book read done PERF
 'I finished reading this book.'
 b. wǒ bǎ [zhè běn shū]_i kàn [t_i wán]
 1SG BA this CL book read finish

In (99a), the result/end denoting element is expressed by the lexical form *wán* 'finish'. (99b) is the underlying structure of (99a).

An important aspect of Sybesma's (1992, 1999) analysis is that every *BA*-sentence has a non-*BA*-counterpart with a *VO* order with the same meaning and the same underlying structure. In reference to (96), what happens in these sentences is that *V* or *V+R* moves to the position occupied by *BA* in (95) (see Chapter 1 above for details). Thus, in our case, (95a) repeated here as (100) is the counterpart of (97) and (101) is the counterpart of (98).

- (100) wǒ kàn le nǎ běn shū.
 1SG read PERF that CL book
 'I read this book.' OR, 'I read at that book.'
 (101) wǒ kàn wán le nǎ běn shū.
 1SG read finish PERF that CL book
 'I read that (whole book).'

In the above, I have introduced Sybesma's analysis of *BA*-construction in Mandarin. The important thing for me is that, according to Sybesma, a *BA*-construction has an inherent endpoint which is expressed by a resultative element. This element may or may not be overt. Basing myself on Sybesma's analysis of *BA*-construction, we look at *ka*⁴¹.

We start with a comparison of Mandarin *BA*-sentences with the Chángshā counterparts (ignoring the perfective markers).

Mandarin:

- (102) a. wǒ bǎ zhè běn shū_i kàn [t_i ø]
 1SG BA this CL book read
 b. wǒ bǎ zhè běn shū_i kàn [t_i wán]
 1SG BA this CL book read finish

Chángshā:

- (103) a. ŋo⁴¹ pa⁴¹ ko²⁴ pən⁴¹ xy³³_i k^han⁴⁵ [t_i ø] *(ka⁴¹)
 1SG BA this CL book read
 b. ŋo⁴¹ pa⁴¹ ko²⁴ pən⁴¹ xy³³_i k^han⁴⁵ [t_i oŋ¹³] *(ka⁴¹)
 1SG BA this CL book read finish KA

What we see is that in Mandarin and Chángshā, the result denoting element can be overt or covert but that in the latter, whether it is covert or not, we always need an extra element, ka⁴¹. This means that whatever it does, it is clear that ka⁴¹ does not mark the endpoint itself: as before, it only doubles it.

To further see that ka⁴¹ is used to double the endpoint in a BA-constuction, and that its appearance has noting to do with the perfective, we can look at sentences in which there is an endpoint, without it having been realized. In other words, sentences with ka⁴¹ but without ta²¹. We saw examples in (26), here are some more:

- (104) a. t^ha³³ i²⁴ tɛin⁴⁵ mən¹³, tɕiu²¹ pa⁴¹ xai¹³tsi
 3SG as soon as enter door JIU BA shoes
 t^ho²⁴ ka⁴¹.
 take off KA
 'He takes off his shoes as soon as he entered the door.'
 b. ŋo⁴¹ ɕian⁴⁵ pa⁴¹ i³³fu ɕi⁴¹ ka⁴¹.
 1SG want BA clothes wash KA
 'I want to wash the clothes.'
 c. pa⁴¹ i³³fu ɕi⁴¹ ka⁴¹!
 BA clothes wash KA
 'Wash the clothes!'

- d. ηo^{41} mau^{21} pa^{41} i^{33}fu ɕi^{41} ka^{41} .
 1SG NEG BA clothes wash KA
 'I have not washed the clothes.'

In the sentences in (104), we see that *ka*⁴¹ is used. (104a) has a habitual reading, (104b) describes a future situation, (104c) is an imperative construction and (104d) is a negated *BA*-sentence. All these sentences contain an endpoint. And these four sentences would be ungrammatical without *ka*⁴¹.

The data presented so far suggest that in *BA*-sentences, *ka*⁴¹ does the same as what it does in the achievement and change-of-state sentences we discussed above: it doubles an endpoint that is already there. As with the other cases, the difference between Chángshā and Mandarin is that the endpoint, which is always part of a *BA*-sentence, needs to be doubled in Chángshā while that is not the case in Mandarin.

Now we can turn to the second question, namely, why *ka*⁴¹ is obligatory in *BA*-sentences in Chángshā, while that is not the case for non-*BA*-sentences?

As we saw in (102), Mandarin non-*BA*-sentences with *le* have two readings, one of which corresponds to the reading of the corresponding *BA*-sentence. The assumption was that non-*BA*-sentences with *le* are syntactically ambiguous in corresponding to two different underlying structures, one of which corresponds to the underlying structure of the corresponding *BA*-sentence. If this is correct, the same is true in Chángshā: (105a) is ambiguous while (105b) is not; (105a) has two underlying structures, one of which contains an endpoint, (105b) only has one (the one with the endpoint).

- (105) a. ηo^{41} ɕi^{41} ta^{21} i^{33}fu .
 1SG wash PERF clothes
 'I washed clothes/did some clothes washing.'
 Or: 'I washed the clothes (finished).'
- b. ηo^{41} ɕi^{41} ka^{41} ta^{21} i^{33}fu .
 1SG wash KA PERF clothes
 'I washed the clothes (finished).'

Sentences with only *ta*²¹ can possibly have two readings, one of which (the second reading) in (105a) has an underlying structure with an endpoint. (105b) only has this structure. It is given in (106) (position of *ka*⁴¹ irrelevant for now; it will be discussed below). With *ka*⁴¹ the sentence based on it gets a completion reading, whether it is *BA*-sentence or a non-*BA*-sentence.

- (106) $\eta o^{41} [_{VP} \ v^0 [_{VP} \ \phi i^{41} [_{SC} \ i^{33} fu \ \emptyset]]] (ka^{41})$
 1SG wash clothes KA

The problem with this analysis is that it provides no answer to the question why *ka*⁴¹ is obligatory in *BA*-sentences and not in the corresponding non-*BA*-sentence with the endpoint reading. If *ka*⁴¹ doubles an endpoint that is already there, why does it not obligatorily double it in non-*BA*-sentences with an endpoint? Why only in *BA*-sentences?

One possible answer to this question is that the endpoint reading in non-*BA*-sentences without *ka*⁴¹ is actually an implied reading, that is, not based on a structure which involves a position for the endpoint. If this suggestion is correct, then, first, (104a) does not correspond to two different underlying structures at all, and, secondly, it strengthens the claim I would like to make that whenever there is a structural endpoint in a Chángshā sentence, it is always doubled by *ka*⁴¹. We will look at similar cases in the following section and discuss this possibility.

The conclusion we can draw from the cases we reviewed so far is that *ka*⁴¹ is obligatory in cases where there already is an endpoint⁸.

Let's look now at the cases in which *ka*⁴¹ does not seem to be obligatory.

3.5.4 Interpreting *ka*⁴¹ in [V+bare/definite noun object] sentences

In section 1.2.6, I have shown that in Mandarin an accomplishment event with a bounded object is not necessarily telic in the sense that the endpoint can be lifted, can be cancelled. As we saw, according to Soh and Kuo (2005), whether

⁸ At this point we have no idea what determines the variation between Mandarin and Xiāng, that is, why in the one language the end point must be doubled while it does not need to do so in the other.

an accomplishment event with a bounded object is telic or not depends on the properties of the object. In an accomplishment with an NPO (No Partial Object, e.g. *draw a circle*), it is telic, with an ALO (Allow Partial Object, e.g. *draw a picture*), it is not necessarily telic. It all depends on whether an object can be considered an instantiation of that object even if it is only partially realized; for details, see chapter 1. In this section, I discuss the status/function of ka⁴¹. I start with the interpretation of ka⁴¹ in [V+bare noun object] sentences, then I move to [V+definite noun object] cases. Consider first the sentences in (107).

- (107) a. t^ha³³ p^hao⁴¹ ta²¹ pu⁴¹.
 3SG run PERF step
 'He ran (did some running).'
 OR: 'He did a run (he has finished (his) running,
 a preset distance).'
- b. t^ha³³ p^hao⁴¹ ka⁴¹ ta²¹ pu⁴¹.
 3SG run KA PERF step
 'He has finished (his) running.'

In (107a), ta²¹ indicates that an action has been terminated or completed (in the case of a preset/predetermined endpoint), while in (107b), where ka⁴¹ is added, only the completion reading is left: the sentence means something like 'he has done his running; he has finished running the distance he had planned to run'. What is important in understanding the sentence is that when a speaker uses ka⁴¹, there is a predetermined endpoint. For example, in (107b), the running distance may be 20 or 30 miles, but no matter what the distance is, the point is that there is such a definite distance. Without ka⁴¹, but with the completion reading, there is only such implication of a set distance.

We have two possibilities to explain the use of ka⁴¹. In one case, we can argue that ka⁴¹ is used to mark or provide an endpoint (here signaling a preset distance). This is possible, since we have seen that the sentence only has a completion reading with ka⁴¹ (106b), and an ambiguous reading without ka⁴¹ (107a). It seems that ka⁴¹ adds the endpoint for the event, and ta²¹ is used to present the event in the perfective. However, as we have pointed out in section 3.4, this is not a sensible approach. The main consideration is constituted by

the cases reviewed in the previous section, the cases in which *ka*⁴¹ is obligatory and in which it doubles an endpoint that is already there. In these cases it clearly does not itself mark the endpoint. Hence, we give up the approach of treating *ka*⁴¹ as adding an endpoint.

We take another possibility. We imagine that the reading of a predetermined or set distance is already in the event before *ka*⁴¹ appears: this is in line with what we have established above, that *ka*⁴¹ only appears in circumstances in which there is an endpoint, though in some cases the endpoint may be covert. *ka*⁴¹ only doubles the endpoint in an event.

This is possible, given the cases mentioned above, where the object contains a definite object. We have seen the sentence in (108). We present it here again:

- (108) a. tsan³³san³³ tɕia²⁴ ta²¹ la⁴⁵ tsa²⁴ pin¹³ko²¹.
 eat PERF that CL apple
 'Tsansan ate at that apple.
 OR: 'Tsansan ate that apple.'
 b. tsan³³san³³ tɕia²⁴ ka⁴¹ ta²¹ la⁴⁵ tsa²⁴ pin¹³ko²¹.
 eat KA PERF that CL apple
 'Tsansan ate that apple.'

The sentence in (108a) is ambiguous: it means that Tsansan ate some of that apple or ate away at the apple and he may or may not have finished it. In other words, a verb with a definite object can be interpreted as telic, but it can also be interpreted as atelic. That is why (108a) can have two readings. What is interesting is (108b). In (108b), where *ka*⁴¹ is added, the sentence must be interpreted such that the action has been completed: he ate the whole apple. The only difference between (108a) and (108b) is that (108b) contains *ka*⁴¹, while (108a) does not. Here *ka*⁴¹ should not be seen as that it marks an endpoint given the above consideration: a verb with a definite object can be telic, in which case there already is an endpoint. If we argue that *ka*⁴¹ is to double an endpoint, the interpretation of the action as having been completed is accounted for: since *ka*⁴¹ is used to double an endpoint, we only have the sentence which had an endpoint to begin with. Put differently, *ka*⁴¹ is used to

disambiguate the otherwise ambiguous sentence. That is why there is only one reading in the sentence.

In (107a) and (108a), we have ambiguous sentences, and as above, we can explain the ambiguity in two different ways: either we say that the sentences are structurally ambiguous (with two underlying structures, only one of which involves an endpoint, each with its own meaning), or we take the endpoint reading as implied, and not related to an underlying structure with an endpoint in it (that is, the sentences are not structurally ambiguous). In that case, the structure of (108a) is different from that in (108b) and we uphold the claim that whenever there is an endpoint, overt or covert, *ka*⁴¹ is there as well. In other words, *ka*⁴¹ is not optional.

This suggestion cannot be upheld when we consider sentences like the following, in which *ka*⁴¹ is really optional, as we saw above; there are not two underlying structures. The interpretation always involves an endpoint. On the one hand it shows that *ka*⁴¹ always doubles an existing endpoint, on the other hand it shows that the reverse situation is not true: it is not the case that whenever there is an endpoint, *ka*⁴¹ is always there.

- (109) Tsan³³san³³ tɕia²⁴ (ka⁴¹) ta²¹ san³³ tsa²⁴ pin¹³ko²¹.
 eat KA PERF three CL apple
 'Tsansan ate three apples.'

In (109), the object is quantized, the sentence expresses a telic event. The point is that *ka*⁴¹ is accepted in the sentence so if we argue that *ka*⁴¹ is used to mark an endpoint for an event, the observation in (109) cannot be accounted for: in view of the fact that here we are not dealing with an implied endpoint (as we saw earlier on; it cannot be cancelled), there is already a structural endpoint in the sentence.

Given the above consideration, we hold that *ka*⁴¹ is used to double an endpoint, though sometimes the endpoint may be covert.

That *ka*⁴¹ doubles an endpoint is not only clear from the cases in which it is obligatory and the cases with the quantized objects but also in the sentences with a result denoting element, such as the ones we saw in (28) and (29) above, one of which is repeated here:

- (110) tsi²⁴lian⁴¹ ti¹³ kao³³ (ka⁴¹) ta²¹.
 quality raise high KA PERF
 'The quality has been improved.'

Here are more cases in which it is clear that *ka*⁴¹ doubles an endpoint reading in [V+definite noun object] sentences which are not in the perfective. Consider (111), with a modal verb in it.

- (111) a. ŋo⁴¹ ɕian⁴¹ k^han⁴⁵ ko²⁴ pən⁴¹ xy³³.
 1SG want read this CL book
 'I want to read in this book.'
 'I want to read this book.'
 b. ŋo⁴¹ ɕian⁴¹ k^han⁴⁵ ka⁴¹ ko²⁴ pən⁴¹ xy³³.
 1SG want read KA this CL book
 'I want to read this book.'

As is indicated, there are two readings in (111a), while there is only one in (111b). The only difference between the two sentences is that *ka*⁴¹ appears in (111b). Clearly, *ka*⁴¹ disambiguates the interpretation of the sentence in (111a) and makes the endpoint reading in the sentence the only one available (111b).

Note that in the same case in Mandarin the lexical form *wán* 'finish' must be added to the sentence to have a completion reading.

- (112) a. wǒ xiǎng kàn zhè běn shū.
 1SG want read this CL book
 'I want to read in this book'/'I want to read this book.'
 b. wǒ xiǎng kàn wán zhè běn shū.
 1SG want read finish this CL book
 'I want to read (and finish) this book.'

There are two readings in (112a), but when we add the element *wán* 'finish' as we do in (112b), we only have one reading left. This again seems to suggest that in Chángshā *ka*⁴¹ is the same as Mandarin *wán*, an impression that is strengthened when we realize that, more generally (not just in sentences with a

modal) the distribution of both elements is quite similar. More examples are presented in (113).

- (113) a. wǒ yóu wán le yǒng jiù huí qù
 1SG swim FINISH PERF swim then back go
 'I will go back after I've done my swimming.'
- b. ŋo⁴¹ iou¹³ ka⁴¹ ta²¹ iun⁴¹ tɕiu²¹ fɛ¹³ k^hə⁴¹.
 1SG swim KA PERF swim then back go
 'I will go back after I have done my swimming.'
- c. ŋo⁴¹ iou¹³ oŋ¹³ ka⁴¹ ta²¹ iun⁴¹ tɕiu²¹ fɛ¹³ k^hə⁴¹.
 1SG swim finish KA PERF swim then back go
 'I will go back after I have done my swimming.'

If we look at (113a, 113b), it appears that *ka*⁴¹ is like the lexical verb *wán* in Mandarin. However, this is not right. The main reason is that *ka*⁴¹ can co-occur with *oŋ*¹³ 'finish' in Chángshā, as is shown in (113c). In other words, in sentences like these, Mandarin *wán* 'done, finish' and its Chángshā counterpart *oŋ*¹³ are lexical result denoting elements, just like comparable to *kao*³³ 'high' in (29b). This confirms that *ka*⁴¹ is different and that it doubles the endpoint that is already there.

Before we go on to the next section and discuss the analysis of *ka*⁴¹, there is one more observation to make. To put it briefly, whenever *ka*⁴¹ appears the endpoint of an event is not cancelable, not deniable. Consider (114):

- (114) a. Lǐ⁴¹ si ɕiə⁴¹ ta²¹ i²¹ fən³³ ɕin⁴¹, ko⁴¹ shi²¹ mau²¹ ɕiə⁴¹
 write PERF one CL letter, but NEG write
 oŋ¹³
 finish.
 'Lisi wrote a letter, but he did not finish it.'
- b. *Lǐ⁴¹ si ɕiə⁴¹ ka⁴¹ ta²¹ i²¹ fən³³ ɕin⁴¹, ko⁴¹ shi²¹ mau²¹
 write KA PERF one CL letter, but NEG
 ɕiə⁴¹ oŋ¹³.
 write finish
 Intended: 'Lisi wrote a letter, but he did not finish it.'

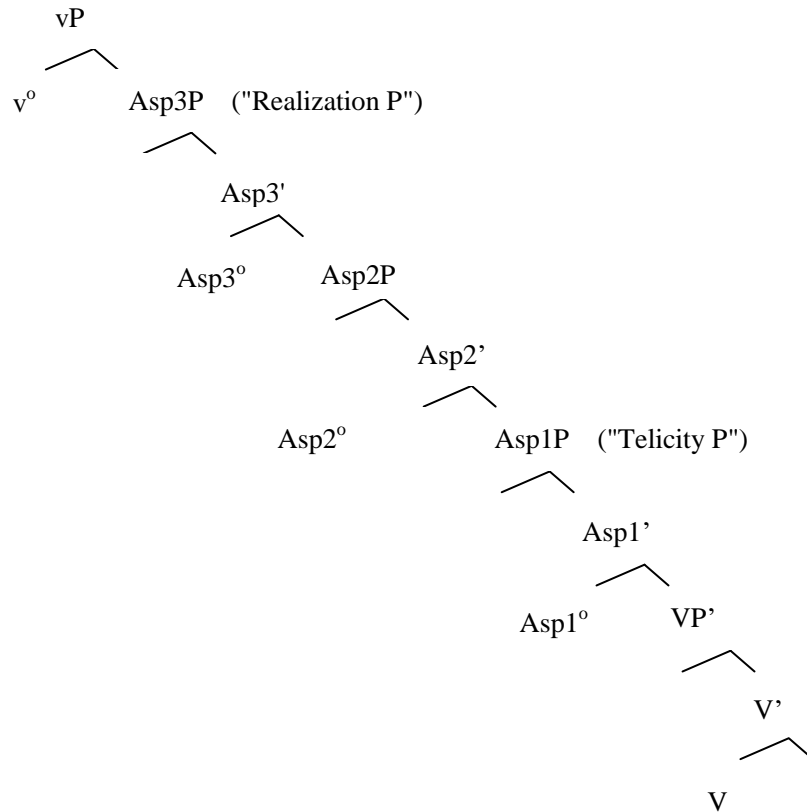
We will now present an analysis of ka ⁴¹.

To sum up, above I provided the groundwork for an analysis of the interpretation of ka^{41} in Chángshā: in all cases we have observed that ka^{41} appears in sentences which are independently provided with an endpoint. This is the generalization we will work with below: ka^{41} appears when there already is an endpoint. That it does not provide the endpoint itself is clear from cases such as achievements, change-of-state predicates, *BA*-sentences and sentences with a resultative. In all cases in which it appears obligatory, there clearly is an endpoint and in all other cases it can be shown that these contain an endpoint independently. In cases in which ka^{41} seems optional, we saw that the effect it has is that it makes the already existing endpoint definitive. When ka^{41} is present, the endpoint can no longer be denied or cancelled.

3.6 A new proposal: *ka*⁴¹ as an Inner aspect marker

In this section, I provide a new proposal to account for the syntactic distribution of *ka*⁴¹. I assume the three layered inner aspect structure I introduced and discussed in the previous two chapters (see (115)), including the modification I proposed with respect to Asp2P, namely that its function depends on the nature of the head that fills it. In chapter 2, I proposed that progressive marker *ta*²¹ occupies this position, in which case a focus on the activity itself is established. In this chapter, I propose that *ka*⁴¹ can also occupy this position (returning to the function ascribed to this position by Sybesma 2017), with the opposite effect: the activity part of the event is no longer accessible for any syntactic operation.

(116)



I have shown that ka⁴¹ is used to double the endpoint in an event though in some cases the endpoint may be covert. The main motivation for this claim comes from the observation that in achievements, in BA-sentences (accomplishments) and change-of-state prediactes, which invariably involve an endpoint, ka⁴¹ is obligatory. We also saw that ka⁴¹ can also appear together with lexical result denoting elements, the kind of elements that we saw (in Chapter 1) occupy the head of TelicityP, or Asp1P.

The question is what the function of ka⁴¹ is. I would like to follow Sybesma's (2017) suggestion that the middle layer of his three layered Inner aspect structure for Mandarin is typically occupied by elements that are traditionally called "phase complements", elements that indicate the successful attainment of the goal of the event (Chao 1968, Tai 1984); we discussed this briefly in chapter 1. Sybesma proposes that this layer, which comes on top of the layer that provides the endpoint proper (TelicityP), has the function of making the endpoint definitive. Once that layer is filled, the accomplishment (activity plus cancelable endpoint) becomes an achievement (activity plus uncancelable endpoint). The consequence of having an uncancelable endpoint is that the activity expressed by the verb which leads to the endpoint is no longer accessible for syntactic operations such as putting it in the progressive. We discussed some of these issues already in Chapter 1.

I would like to propose that Chángshā ka⁴¹ occupies Asp2⁰. It is like *dì ào* 'off' in Mandarin as introduced in Chapter 1: see (117) - (118), where the (a) sentences is in Mandarin and the (b) sentences are in Chángshā.

- (117) a. Tā bǎ diànnǎo nòng-sǐ- dì ào - le!
 3SG BA computer do- dead- off- PERF
 'He completely destroyed the computer!'
 b. t^ha³³ ba⁴¹ tiān⁴⁵lao⁴¹ lǎn²¹ ǎi⁴¹ ka⁴¹ ta²¹.
 3SG BA computer do dead KA PERF
 'He completely destroyed the computer!'

- (118) a. wǒ zǎo jù bǎ kè tīng cā wán le.
 1SG earlythen BA living room sweep finish PERF
 'I finished cleaning the living room a long time ago.'

- b. ŋo⁴¹ tsao⁴¹ tɕiu²¹ ba⁴¹ k^hə²⁴ tin³³ ts^ha²⁴ oŋ¹³ ka⁴¹ ta²¹.
 1SG early then BA living room sweep finish KA PERF
 'I finished cleaning the living room a long time ago.'

As expected, with ka⁴¹, accomplishments are unable to be presented in the progressive. I have shown it in (115a), more examples are presented in (119).

- (119) a. *nǐ zǎi nòng-huǎ-di ào wǒ-de diànnǎo! (Mandarin)
 2SG PROG do- broken-off 1SG-SUB computer
 b. *li⁴¹ tsai²¹ ko²⁴ nən²¹ xuai²¹ ka⁴¹ ŋo⁴¹ ti tiən⁴⁵ lau⁴¹.
 2SG PROG do- broken-off KA 1SG-SUB computer
 c. li⁴¹ tsai²¹ ko²⁴ nən²¹ xuai²¹ ŋo⁴¹ ti tiən⁴⁵ lau⁴¹.
 2SG PROG do- broken 1SG-SUB computer
 'You are destroying my computer!' (b,c: Chángshā)

In (119b), ka⁴¹ is used, the sentence presented in the progressive is unacceptable, as is the case in Mandarin (119a); however, if ka⁴¹ is not used, the sentence is acceptable (119c).

All these sentences seem to show that Chángshā shares the property of Mandarin in the use of Asp2P. What is different is that in Chángshā, Asp2^o is filled more often, while in Mandarin, in most cases, the Asp2^o is empty: sentences like (119a) with *di ào* doubling the overt endpoint are quite rare. It seems that Chángshā has grammaticalized this function. The following examples show the difference between these two languages once again:

- (120) a. ŋo⁴¹ pa⁴¹ i³³ fu ɕi⁴¹ * (ka⁴¹) ta²¹. (Chángshā)
 1SG BA clothes wash KA PERF
 'I washed the clothes.'
 b. xua³³ xǎ¹³ * (ka⁴¹) ta²¹.
 flower red KA PERF
 'The flowers have become red.'
 c. ts^hə³³ tsi fan³³ { * (ka⁴¹) ta²¹ / *ka⁴¹ / *ta²¹ }.
 car turn over KA PERF
 'The car turned over.'

- (121) a. wǒ bǎ yīfu xǐ le. (Mandarin)
 1SG BA clothes wash PERF
 'I washed the clothes.'
- b. huā hóng le.
 flower red PERF
 'The flowers have become red.'
- c. chēzi fān le.
 car turnover PERF
 'The car turned over.'

Comparing sentences in (120) with those of (121), we can see that in the same circumstances, *ka*⁴¹ is needed in Chángshā whereas Mandarin can do without such element. The same is true for sentences with a result denoting element: *ka*⁴¹ appears in the company of a lexical result denoting element, as we have seen several times.

We have also seen examples illustrating for Chángshā as well that the effect of adding *ka*⁴¹ is that of making the endpoint such that it can no longer be stripped off.

Note that in chapter 2, I propose that *ta*²¹_{PROG} occupies the head of Asp2P position, without explaining why it should be there. Now I think that our answer is like this. According to Sybesma (2017), the function of Asp2P, if filled, is to make sure that the process that precedes the endpoint in the head of Asp1 is not available for further syntactic operations. However, I think that the function of Asp2P in Chángshā relies not on whether it is filled (or not), but (also) what it is filled with. It can be an element that is used to block the event from being syntactically accessible, but it can also be an element which is, on the contrary, used to indicate that an action presented is ongoing. It happens that two such elements are observed in Chángshā. *ka*⁴¹ is used to block further access to the activity preceding the lexical endpoint (for example, such event cannot be present in the progressive), while *ta*²¹_{PROG} in contrast focuses on the activity in question and indicates that the action presented is ongoing.

In what follows, I am going to see that the proposed analysis can provide an account for the facts that have been observed in the beginning.

3.7 Accounting for the facts

In the preceding sections, I investigated the interpretation and distribution of *ka*⁴¹. I found that *ka*⁴¹ always appears in a telic event, though sometimes the endpoint is covert or implicit. Descriptively, *ka*⁴¹ doubles the endpoint that is already there. However, the function of *ka*⁴¹ is to make this endpoint more definitive and block the activity that precedes it from participating in further syntactic operations. I adopted Sybesma's (2017) three-layered Inner aspect system for Chángshā: Asp3P, Asp2P and Asp1P from bottom-up in the sentence structure. *ka*⁴¹ occupies the Asp2^o position. Asp3^o is the lexical aspect level which is sometimes occupied by result denoting elements. Asp1P is the focus of our analysis in chapter 2, I will not repeat it here.

In what follows I show that the proposed analysis solves the problems we encountered in the beginning of the thesis. For convenience, I first repeat the relevant contexts in which *ka*⁴¹ is used. I have presented these contexts in section 3.2, I will briefly go over them again here.

(122)

(i) *ka*⁴¹ as obligatory

In achievements, BA-constructions and stative predicates

- a. without *ka*⁴¹ → ungrammatical
- b. with *ka*⁴¹ → completion

(ii) *ka*⁴¹ as optional without variation of the interpretations

- A. With a quantized noun object
 - a. without *ka*⁴¹ → completion
 - b. with *ka*⁴¹ → completion
- B. With resultative constructions → completion
 - a. without *ka*⁴¹ → completion
 - b. with *ka*⁴¹ → completion

(iii) *ka*⁴¹ as optional with variation of the interpretation of the sentences

- A. With a bare noun object
 - a. without *ka*⁴¹ → termination or completion
 - b. with *ka*⁴¹ → completion
- B. With a definite noun object

- a. without *ka*⁴¹ → termination or completion
- b. with *ka*⁴¹ → completion

In (i) *ka*⁴¹ is obligatory. These three cases are especially interesting because these are all inherently telic: achievements and change of state cases are telic, by definition, and earlier on in this chapter, we saw that *BA*-sentences can only be formed if there is an endpoint. In (ii), in resultative constructions and accomplishments with quantized objects, *ka*⁴¹ is optional, there is no clear difference in interpretation whether *ka*⁴¹ is used or not. In (iii), with *ka*⁴¹, the event is telic, without *ka*⁴¹, it can be telic or it is not. We look at a few of these cases in more details here.

3.7.1 *ka*⁴¹ in (i) and (ii)

We start with context (i). We have seen in section 3.2.1.3 that in accomplishments in *BA*-constructions, achievements and change-of-state predicates, *ka*⁴¹ is obligatory. Leaving out *ka*⁴¹ will lead to ungrammaticality. According to my analysis in section 3.5.3, *BA*-constructions in Mandarin and Chángshā are similar in the sense that they contain an endpoint. However, Chángshā is different from Mandarin in that there is always the extra element *ka*⁴¹, while in Mandarin there is no such element. The same is true for stative predicates and achievements in the perfective. In these three cases, *ka*⁴¹ doubles the endpoint.

This analysis raises the question why *ka*⁴¹ is obligatory in these contexts and not in others. For instance, in accomplishments with a bounded object or resultative structures with an overt result denoting element, *ka*⁴¹ is optional. I repeat one sentence in (123).

- (123) a. t^ha³³ tɕia²⁴ (ka⁴¹) ta²¹ san³³ tsa²⁴ pin¹³ ko⁴¹.
 3SG eat KA PERF three CL apple
 'He ate three apples.'
- b. t^ha³³ pa⁴¹ san³³ tsa²⁴ pin¹³ko⁴¹ tɕia²⁴ *(ka⁴¹) ta²¹.
 3SG BA three CL apple eat KA PERF
 'He ate three apples.'

As introduced in section 3.2.2, ka⁴¹ in (123a) is optional, while in (123b) ka⁴¹ is obligatory. We have to explain the difference between (123a) and (123b) in terms of the use of ka⁴¹.

Before I provide an answer to this question, I repeat that ka⁴¹ doubles the already existing endpoint and that it does so to make the endpoint definitive as defined above. With this mind, we return to the question, why ka⁴¹ is obligatory in achievements and BA-constructions and change-of-state predicates, but not in accomplishments with a bounded object, as we saw in (123).

I think that this is related to the properties of constructions in these two cases. Note that in accomplishments with a bounded object and resultatives, the endpoint is compositional; while in achievements and change-of-state predicates it is inherent. Note that, in many languages, including Mandarin and Chángshā, it is possible to present accomplishments with bounded objects or resultative constructions in the progressive (as illustrated once more in (124)), but it is impossible to present achievements and change-of-state cases in the progressive. These endpoints cannot be stripped off. When it is impossible to have the predicate without the endpoint, ka⁴¹ is obligatory.

- (124) a. t^ha³³ tsai²¹ko²⁴ t^han⁴⁵ tɕ^hən³³ i³³fu.
 3SG PROG iron flat clothes
 'He is ironing the clothes flat.'
 b. t^hā tsai²¹ko²⁴ fā²⁴ tən²¹ t^hā ti tɕi⁴⁵tɕ^hə³³.
 3SG PROG start move 3SG SUB car
 'He is starting his car.'

The BA-construction is telling here. Although the endpoint is not inherent in the sense it is in achievements, in this case the presence is required structurally: without an endpoint, there is no BA-construction. And just like achievements, but unlike their non-BA-counterparts, BA-sentences are incompatible with the progressive. The endpoint cannot be lifted and ka⁴¹ is obligatory. In all other cases the endpoint, although it is there, can be lifted and ka⁴¹ is not obligatory.

The conclusion is that a predicate cannot exist without an endpoint, either because it is inherent like in achievements, or structurally, like in *BA*-sentences, ka⁴¹ is obligatorily present.

3.7.2 ka⁴¹ in (iii)

Now, we come to the construction [V+bare/definite noun object] ((iii) above). A relevant example is repeated in (125).

- (125) a. ŋo⁴¹ iou¹³ ta²¹ iun⁴¹.
 1SG swim_V PERF swim_N
 'I did my/a swim (preplanned stretch).'
 'I swam.'
- b. ŋo⁴¹ iou¹³ ka⁴¹ ta²¹ iun⁴¹.
 1SG swim_V KA PERF swim_N
 'I did my/a swim (preplanned stretch).'

We have established that in (125b), there is an endpoint present, which is doubled, and, in this case, made syntactically visible by ka⁴¹. The situation in (125) is similar to what we are familiar with in (126), examples we have also seen before, exemplifying the other type in (iii) in (122) above.

- (126) a. tsan³³ san³³ k^han⁴⁵ ta²¹ la⁴⁵ pən⁴¹ xy³³.
 read PERF DEM CL book
 'Tsansan read in that book.'
 Or, 'Tsansan read (and finished) that book.'
- b. tsan³³ san³³ k^han⁴⁵ ka⁴¹ ta²¹ la⁴⁵ pən⁴¹ xy³³.
 read KA PERF DEM CL book
 'Tsansan read (and finished) that book.'

In (126), the object is an NP with a demonstrative, which, as we have seen, may, but does not necessarily, lead to a telic reading, as we see in (126a). As (126a) shows, there is one reading in which there is an endpoint. In (126b), what ka⁴¹ does here, rather than providing an endpoint, is doubling the

endpoint that is already there and making it such that it can no longer be tampered with. With *ka*⁴¹ the endpoint reading is the only reading available.

The difference with (126) is that the NP in (125) is a bare noun, and a non-referential one as well, which makes it hard, or next to impossible, to get an endpoint reading without any marking at all. However, in view of the fact that bare nouns can be definite, hence bounded, making the predicate they are part of telic, it is in principle possible that there is an implicit endpoint in (125a), and that is why (125a) is ambiguous.

3.7.3 Ambiguous sentences with *ka*⁴¹

Now I would like to introduce the observation that certain sentences even with *ka*⁴¹ are ambiguous. In an accomplishment with a definite noun object and a post verbal durative phrase, the sentence will become ambiguous. See (127) - (128).

- (127) ŋo⁴¹ k^han⁴⁵ ka⁴¹ la⁴⁵ pən⁴¹ xy³³ san³³ ko⁴⁵ ɕiau⁴¹si¹³.
 1SG read KA that CL book three CL hours
 (i) 'I read (in) that book for three hours.'
 (ii) 'I finished the book in three hours.'

- (128) la⁴⁵ tia^u²⁴ ləu²¹ ɕiu³³ ka⁴¹ pən⁴⁵ ko⁴¹ iuə²⁴.
 that CL road pave KA half CL month
 (i) 'That road has been paved in half a month (finished).'
 (ii) 'That road has been paved for half a month (not finished).'

In these sentences, the action can be interpreted as having been completed in three hours; it can also be interpreted as having come to an end after three hours. The question is how to explain this ambiguity.

Knowing that *ka*⁴¹ can double an endpoint that is already there, the question is what endpoints it doubles in e.g. (127) in such a way that that sentence is ambiguous. As we have pointed out before, predicates involving an object with a demonstrative in Chángshā, as it is in Mandarin, can be interpreted both as bounded and as unbounded, similar to the predicates with a

When the object with the demonstrative is bound and the predicate is telic, *ka*⁴¹ doubles the endpoint of the predicate, and the durational expression tells us how long it took to reach that endpoint. This leads to the interpretation marked in (127b). The same interpretation can be extended to (128).

3.7.4 ka^{41} in negative constructions

(129) a. tsan³³ san³³ mau²¹ ɕi⁴¹ i³³ fu.
NEG wash clothes
'Tsansan did not do clothes-washing.'
b. tsan³³ san³³ mau²¹ ɕi⁴¹ ka⁴¹ i³³ fu.
NEG wash KA clothes
'Tsansan did not wash the clothes.'

3.8 Sentences in which *ka*⁴¹ seems to be a marker of the perfective

We have come across sentences in the perfective with *ka*⁴¹ but without *ta*²¹. This was the kind of sentence that inspired earlier researchers to propose that *ka*⁴¹ is a perfective marker as well, which, as we argued is not the right analysis. Some examples are repeated here. (130) is the repetition of (1) in this chapter.

- (130) a. *shan*²¹*u*⁴¹ *ŋo*⁴¹ *mai*⁴¹ *ka*⁴¹ *xu*³³ *tɕiu*²¹ *fɛ*¹³ *kʰə*⁴⁵ *ta*²¹.
 morning 1SG buy KA book then come back PERF
 'I went back home in the morning after I bought a book.'
- b. *ŋo*⁴¹ *lau*²¹ *ka*⁴¹ *xau*⁴¹*to*³³ *ɕiau*⁴⁵*fa*²¹.
 1SG make KA many mistake
 'I made a lot of foolish mistakes.'
- c. *tsan*³³*san*³³ *mai*⁴¹ *ka*⁴¹ *san*³³ *pən*⁴¹ *xy*³³.
 buy KA three CL book
 'Tsansan bought three books.'

In (130), *ta*²¹ is missing, *ka*⁴¹ is used, and these sentences are interpreted in the perfective. Based on the analysis so far we have had, which argue that *ka*⁴¹ is not a perfective marker, while *ta*²¹ is. The immediate question is, why can *ta*²¹ be missing in (129)? How can the perfective reading be produced? More examples can be seen in (131) - (132).

- (131) a. **ɕiə*²⁴ *in*¹³ *ka*⁴¹.
 snow melt KA
 b. *ɕiə*²⁴ *in*¹³ *ka*⁴¹ *ta*²¹.
 snow melt KA PERF
 'Snow melted.'
- c. *ɕiə*²⁴ *in*¹³ *ka*⁴¹ *san*³³ *tʰian*³³.
 snow melt KA three days.
 'The snow melted in three days.'
- (132) *kə*²⁴*rən*¹³ *mən*¹³ *lai*¹³ *ka*⁴¹ *pon*⁴⁵ *ko*⁴¹ *ɕiao*⁴¹*si*¹³.
 guest PL come KA half CL hour
 'The guests have been arriving for half an hour.'

These two sentences are presented with achievement predicates. As is in the cases in (130), *ta*²¹ can be missing in (131c) and (132). Again the question is, why *ta*²¹ can be missing in these sentences?

Careful observation shows that these sentences are different from those in which *ta*²¹ cannot be missing. For instance, sentence (129a) contains two

connective actions; in (130b) - (130c), the objects are quantized; in (131) - (132), there is a durative phrase *san*³³ *tʰian*³³ 'three days', and *pon*⁴⁵ *ko*⁴¹ *ʃiao*⁴¹ *si*¹³ 'half an hour' respectively. Without these elements, *ta*²¹ cannot be missing, as we have seen in previous sections. There is always something else in the sentence in which *ta*²¹ can be missing. This sounds familiar from the discussion in chapter 2 regarding *ta*_{prog}, which is argued to be located in Asp2 position, a position which is too low to help a sentence to anchor to tense. To use *ta*_{prog}, other elements are needed to help anchor the sentence to tense. It seems that the same thing happens here.

Before we can answer the story, we go back to the work by Tsai (2008). As we discussed earlier, Tsai (2008) discusses what he calls “incomplete” sentences in Mandarin. An example is given in (132) (Tsai’s (6a)):

- (133) ??AQ n á le shū.
 AQ take-PERF book
 'AQ took books.'

We saw before that Tsai (2008) explains the unacceptability by claiming that all sentences must be “tense anchored” and that one way of doing this is for the Asp to move to T. Asp-marker *le*, however, is too low to raise to T. As a result, the necessary link cannot be made and the sentence is not acceptable. Tsai presents a number of methods in which these sentences can be “repaired”. Here is an overview:

- by embedding the sentence in a bigger sentence (see (134))
- with negation (e.g., *méi ná shū*: not.have take book)
- with modals (e.g., *yīnggāi ná shū*: ought to take book)
- employing imperative/exclamative/counterfactual intonation
- using contrastive focus
- using other aspect markers (e.g., *n á-guo shū*: ‘he once took a book’; experiential aspect)
- adding a sentence final particle
- adding a temporal adverb
- with event quantification or a quantified object (see (135))

- (134) AQ n á-le shū, jiù zǒu-le.
 AQ take-PERF book then leave-PERF
 'AQ left after taking the book.'
- (135) a. AQ n á-le sān běn shū.
 AQ take-PERF three CL book
 'AQ took three books.'
- b. AQ n á-le sān c ì shū.
 AQ take-PERF three time book
 'AQ took books three times.'

As we saw above, Tsai's point of departure is the "Generalized Anchoring Principle", a general mapping mechanism of spelling out the event variable in a sentence. In English, Tsai claims, the event variable is bound by tense morphology, but Chinese “employs all sorts of eventuality construals such as event quantification, event coordination, event subordination and event modification to bring out the event variable” (Tsai 2008:681).

Turning to the methods in which the sentences with *ka*⁴¹ in Chángshā can be repaired, we see that exactly the same type of methods is used as in Mandarin.

In (130a), the two-consecutive actions are connected by the temporal adverb *tçiu*²¹ 'then'. Following Tsai we say that the first sentence is anchored to tense by the reference to the second one, that is why (129a) is grammatical (giving us the false impression that *ka*⁴¹ is a perfective marker).

In (130b), we see yet other cases with *ka*⁴¹ and without *ta*²¹, with a perfective reading. These cases happen to also be similar to sentences used by Tsai, such as (135) above, involving event quantification to bring out the event variable.

In (131) and (132), the sentences are presented with achievement predicates. There is a durative phrase in each sentence. The event variables in these sentences are hence brought out in the sense of Tsai (2008).

To be brief, since *ka*⁴¹ is not a perfective marker, it cannot be used alone as *ta*²¹_{PROG} is. This is because *ka*⁴¹ and *ta*²¹ occupy the same position and a sentence with them but without anything in Asp3 can be saved when other material helps to strengthen T to do its job. In a few cases in which *ka*⁴¹ seems to function as a

perfective marker, there are in fact elements in the sentences which are used to help anchor the sentence to tense.

3.9 Summary

In this chapter, I focused on the interpretation and distribution properties of *ka*⁴¹. I first introduced two approaches to the use of *ka*⁴¹. One of them is to treat *ka*⁴¹ as a perfective marker like *ta*²¹, but different in several respects. In the other approach, *ka*⁴¹ is seen as an Extended Event Boundary marker in the general sense.

Yet, as I have shown, the previous analyses of *ka*⁴¹ are unsatisfactory. I pointed out that there are many facts that cannot be accounted for with either the perfective approach or the Extended Event Boundary marker approach.

To provide a new account for the use of *ka*⁴¹, I reanalyzed the distribution and the semantic interpretation of *ka*⁴¹. I pointed out that *ka*⁴¹ always appears with predicates that already have an endpoint, overt or implicit. It doubles the endpoint.

To account for the use of *ka*⁴¹ I propose that *ka*⁴¹ is located in the position Sybesma (2017) calls Asp2^o. The function of *ka*⁴¹ is to make the endpoint definitive: it can no longer be cancelled or denied. As a consequence, the activity preceding the endpoint is rendered inaccessible for syntactic operations like the progressive.

Two more things were pointed out. First, we saw that *ka*⁴¹ is obligatory in cases in which the endpoint is a necessary part of the predicate, either lexically (achievements, change-of-state cases) or structurally (BA-sentences).

Secondly, *ka*⁴¹ occupies the same position as progressive marker *ta*²¹. Their effect is mutually opposite: the former blocks access to the activity preceding the endpoint, the latter focuses on it.

Chapter 4. Evidence from Xùpǔ and Mandarin

4.1 Introduction

In chapter 2, we provide an analysis to account for the fact that ta^{21} in Chángshā can be used as a realization marker indicating that an event has been terminated/completed, and as a progressive marker indicating that an action is ongoing. We also point out that the durative reading of ta^{21} in a result state is derived from the perfective ta^{21} .

In this chapter, I argue that the proposed analysis of ta^{21} in chapter 2 can be further supported by the case of the imperfective in the Xiāng variety of Xùpǔ and Mandarin. I first introduce the use of $tau^{21} \dots tsai^{24}$ in Xùpǔ. Then I argue that tau^{21} in $tau^{21} \dots tsai^{24}$ is used not only as a progressive marker, but also as a perfective marker. The use of tau^{24} in Xùpǔ is in fact like that of ta^{21}_{PERF} and ta^{21}_{PROG} in Chángshā. I further provide an analysis showing that $tsai^{21}$ in $tau^{21} \dots tsai^{24}$ is in fact used to anchor an event to tense. $tsai^{21}$ is like $tsai^{21}ko^{24}$, which we have mentioned in chapter 2. Like $tsai^{21}ko^{24}$ in Chángshā, $tsai^{21}$ in Xùpǔ is one of the ways used to license the use of tau^{21} as a progressive marker. I claim that the use of tau^{21} can be seen as evidence to support our analysis of ta^{21} .

Note, however, what we are talking about is not an isolated phenomenon in Xiāng dialects. After pointing out the similar patterns in Xùpǔ and Chángshā, I move to the use of the so-called durative *zhe* in Mandarin. We have mentioned it in chapter 1 and chapter 2, however, in this chapter I am going to provide a more detailed discussion of it. I will provide an analysis to account for the multifunction of *zhe*; I am going to argue that we have two *zhes*. One is used to express the perfective meaning; another is used to express progressive meaning. However, as it is the case in Chángshā and Xùpǔ, when *zhe* is used as a progressive marker, other elements are needed. Tsai (2008) has mentioned some of them. We point out that sentence final *ne* functions just like sentence final $tsai^{21}ko^{24}$ and $tsai^{21}$ Chángshā and Xùpǔ respectively. I further point out that what is found in Xùpǔ, the existence of zhe_{PERF} and zhe_{PROG} can also be

used to support my analysis of ta^{21} . The pattern that I have found in these three languages is presented in (1) - (3).

- (1) a. $tau^{21}_{\text{PERF}}, tau^{21}_{\text{PROG}}$ (Xùpǔ)
 b. $tau^{21} \dots tsai^{24}$ (tau^{21} is a progressive marker)
- (2) a. $zhe_{\text{PERF}}, zhe_{\text{PROG}}$ (Mandarin)
 b. $zhe \dots ne$ (zhe is a progressive marker)
- (3) a. $tau^{21}_{\text{PERF}}, tau^{21}_{\text{PROG}}$ (Chángshā)
 b. $ta^{21} \dots tsai^{21} ko^{24}$ (ta^{21} is a progressive marker)

Note that in the above, $tsai^{24}$, $tsai^{21} ko^{24}$ and ne are per language only one of the elements which can be used to license the preceding aspect particles tau^{21} , ta^{21} and zhe as a progressive marker.

At the end of this chapter I point out that data from historical texts can also be used to support the idea of the existence of ta^{21}_{PERF} and ta^{21}_{PROG} . Historically, zhe has developed from being an imperfective marker to be a perfective marker. zhe lost its use as a perfective marker after the sentence final *liǎo* 'finish' evolved into a perfective marker. ta^{21} is the cognate of zhe . The use of *liǎo* does not appear in Chángshā, hence the existence of ta^{21}_{PERF} and ta^{21}_{PROG} can be seen as an inheritance of earlier phases of Chinese.

The organization of this chapter is as follows. There are 5 sections in this chapter. In section 4.2, I provide an analysis for $tau^{21} \dots tsai^{41}$ in Xùpǔ, pointing out that tau^{21} can be used as a perfective marker, it can also be used as a progressive marker. Just like the case of ta^{21} in Chángshā, tau^{21} needs other elements to go with it when it is used as a progressive marker.

In section 4.3, I provide an analysis of zhe in Mandarin. I point out that zhe is also a multifunctional particle. It can be used as a perfective marker indicating that an endpoint has been realized, but it can also be used to indicate that an action is ongoing and continuous. What is different is that as a progressive marker, zhe needs to be accompanied by other material, as is the case of ta^{21} and tau^{21} . Given the observation of the use of zhe , I claim that the analysis of ta^{21} is further supported.

In section 4.4, I point out that in cases where *zhe/le* is used in Mandarin, only *ta*²¹ is used in Chángshā, which can be shown that *ta*²¹ plays functions of both *zhe* and *le*. In section 4.5, I show with historical texts that *zhe* has developed from being an imperfective to be a perfective. *ta*²¹ is the cognate of *zhe*, *ta*²¹ followed the same development. However, as just noted, unlike Mandarin, it did not develop another perfective marker. Section 4.6 is the summary.

4.2 *tau*²¹... *tsai*⁴¹ in Xùpǔ

As is mentioned in chapter 1, Xùpǔ is located in the west part of Húnán province, and like Chángshā, Xùpǔ dialect belongs to Xiāng dialect family. The language of Xùpǔ has five types of aspect. They are perfective, durative, progressive, experiential, and prospective (Hè 1997). These aspectual meanings are expressed by particles or combination of particles. For example, *lia*³³ is used to express the perfective, preverbal *tsai*⁴¹ is used to indicate that an action is ongoing, and *tau*²¹... *tsai*⁴¹ is used to indicate the continuation of a result state (i.e., durative) or the ongoingness of an action (progressive). In the present chapter, I limit my attention to *tau*²¹... *tsai*⁴¹. I will mention the progressive marker *tsai*⁴¹ and the perfective marker *lia*³³ whenever it is relevant to mention them.

The *tau*²¹ *tsai*²⁴ combination is multifunctional. It can be used to indicate that an action is continuous; it can also be used to indicate that a result state stays. The language also has the preverbal *tsai*⁴¹, which is used to indicate the progressive. For the present purpose, we focus on the use of *tau*²¹... *tsai*²⁴, which is illustrated in (4) - (7) (from Qú 2007).

- (4) a. ηo^{41} lau^{33} tau^{21} $ti\grave{a}n^{41}si$ $tsai^{41}$.
 1SG watch TAU TV TSAI
 'I am watching TV.'
- b. $*\eta o^{41}$ lau^{33} tau^{21} $ti\grave{a}n^{41}si$.
 1SG watch TAU TV
 'Intended: I am watching TV.'

- c. *ŋo⁴¹ lao³³ tiən⁴¹si tsai⁴¹.
 1SG watch TV TSAI
 'Intended: I am watching TV.'

- (5) a. mən²⁴ k^hai³³ tau²¹ (tsai⁴¹).
 door open TAU TSAI
 'The door is open.'
 b. xo²⁴ tsi kon⁴¹ tau²¹ (tsai⁴¹).
 box empty TAU TSAI
 'The box is empty.'

- (6) a. xua³³ xən¹³ tau²¹ tsai²⁴.
 flower red TAU TSAI
 'Flowers are being red.'
 b. *Tsan³³san³³ t^hən³³min¹³ tau²¹ tsai⁴¹.
 clever TAU TSAI
 'Intended: Tsansan is being clever.'

- (7) a. tsan³³san tɕi²⁴ tau²¹ tsai⁴¹.
 anxious TAU TSAI
 'Tsansan is being anxious now.'
 b. *tsan³³san ts^hin¹³k^huai²⁴ tau²¹ tsai⁴¹.
 diligent TAU TSAI
 'Intended: Tsansan is being diligent.'

The combination *tau*²¹... *tsai*⁴¹ in (4a) indicates that the action is going on. Note that neither *tau*²¹ nor *tsai*⁴¹ can be left out. Leaving out either of them will cause ungrammaticality, see (4b, 4c). *tsai*⁴¹ is optional in (5). However, its deletion will lead to a slight difference in interpretation. For example, in (5a), if the sentence-final *tsai*⁴¹ is used, the sentence means that the door is open; the speaker emphasizes the present state of the door: it is open; without sentence final *tsai*⁴¹, the sentence is simply a general description of the completion of the action: someone opened it. By uttering the sentence, the speaker is only concerned with the fact that someone opened the door. (6a) shows that

stage-level⁹ adjectives can appear with *tau*²¹... *tsai*⁴¹, while individual level adjectives cannot (6b). The same is true for psych-verbs. With stage-level psych-verbs, the combination is optional (7a); while for individual level psych-verbs, the combination is not acceptable.

The following questions arise based on the above observation:

- a) What is the interpretation of *tau*²¹?
- b) What is the relationship between *tau*²¹ and *tsai*⁴¹ when they are combined?

In previous analyses, there are two approaches to dealing with the combination *tau*²¹... *tsai*⁴¹. In one analysis, the two particles are argued to have different functions. Specifically, *tau*²¹ indicates that the action presented is ongoing. *tsai*⁴¹, on the other hand indicates the continuation of the state. Furthermore, *tau*²¹ functions at the verbal level, whereas *tsai*⁴¹ scopes over the entire sentence (Qú 2007).

In the other approach, the combination of *tau*²¹ and *tsai*⁴¹ is treated as one unit, marking the progressive aspect, and indicating either an ongoing action, or a durative state (Hè 1997). When it is used to indicate an event as ongoing, it is similar to preverbal progressive marker *tsai*⁴¹. However, no detailed analysis is given. It is not clear when it can be used to indicate the duration of a state, and when it can be used to indicate an ongoing action. Furthermore, Hè (1997) does not even distinguish *tau*²¹...*tsai*⁴¹ from *tsai*⁴¹ when both are used to indicate that an action is ongoing.

However, I do not think that the use of *tau*²¹... *tsai*⁴¹ has ever been clearly explained. For example, in Hè (1997), it is unclear why the combination is necessary, since *tau*²¹ can sometimes stand alone with *tsai*⁴¹ being optional. Treating them as one unit simply neglects the difference in interpretation caused by the two. In addition, *tau*²¹ is verb final and *tsai*⁴¹ is sentence final. Given the distributional differences, we would like to understand what the relationship between *tau*²¹ and *tsai*⁴¹ is.

⁹ I refer to the distinction between stage level predicate and stage level predicate in terms of Carson (1977b), where a stage level predicate refers to a transitory property of individuals, while an individual level predicate refers to properties of individuals that are permanent stable.

Qú (2007) encounters the same problem. If *tau*²¹ is what he says it is, a marker of progressive aspect, it is unclear why it cannot stand alone in the same way as other verbal aspect markers. For example, the perfective marker *lia*³³, or the progressive marker, preverbal *tsai*⁴¹, can stand alone in a sentence. See (8).

- (8) a. *ɕiɛ*⁴¹ *lia*²¹ *tsuo*⁴¹ *ŋiɛ*⁴¹.
 do PERF homework
 '(He) did his homework.'
 b. *tsai*⁴¹ *ɕiɛ*⁴¹ *tsuo*⁴¹ *ŋiɛ*⁴¹.
 PROG do homework
 '(He) is/was doing his homework.'

In (8a), *lia*³³ is a perfective marker and in (8b), *tsai*⁴¹ is a progressive marker. Both particles stand alone in the sentence.

Furthermore, Qú can also not explain why *tsai*⁴¹ is obligatory in some cases (4), while in some other cases, it is optional (5) - (7).

Basing myself on these observations, I think that it is unsatisfactory to treat *tau*²⁴... *tsai*⁴¹ as a progressive marker. It is also not a good idea to argue that *tau*²¹ scopes over VP and *tsai*⁴¹ scopes over the whole sentence. In what follows, I first argue that the combination *tau*²⁴... *tsai*²⁴ should not be treated the same as preverbal *tsai*⁴¹, as is argued in Hè(1997).

4.2.1 Verb final *tsai*⁴¹ is different from verb preceding *tsai*⁴¹

As mentioned above, Hè(1997) does not differentiate preverbal *tsai*⁴¹ from the combination *tau*²¹... *tsai*⁴¹. According to her, the combination is just like the preverbal progressive *tsai*⁴¹ when used to express progressive meaning with dynamic verbs. In Qú (2007), however, the two are treated differently. Preverbal *tsai*⁴¹ is said to mean that someone is doing something. The focus is on the ongoingness of the action; while *tau*²¹... *tsai*⁴¹, on the other hand, supposedly emphasizes the continuation of the action or the duration of the result state expressed by the event.

The first relates to the negative construction. The observation is that *tsai*⁴¹ can be used in negative sentences, which is not possible for *tau*²¹ ... *tsai*⁴¹.

- Mau*²¹ 'not have' in (9) is a negation marker. (9a) shows that *mau*²¹ can be used with *tsai*⁴¹ to negate an ongoing action, which is not acceptable in *tau*²¹... *tsai*⁴¹. If the two are both progressive markers, the difference they show in negation constructions is unexpected.

(10) a. tsan³³san tsai²¹ ɕi⁴¹ i³³fu.
 PROG wash clothes
 'Tsansan is washing the clothes.'
 b. tsan³³san ɕi⁴¹ tau²¹ i³³fu tsai⁴¹.
 wash TAU clothes TSAI
 'Tsansan is washing the clothes.'

- (11) a. *mən¹³ tsai⁴¹ k^hai³³ .
 door PROG open
 lit: 'The door is now opening.'
 b. mən¹³ k^hai³³ tau²¹ tsai⁴¹ .
 door open TAU TSAI
 'The door is open.'

- (12) a. pɛ³³tsi p^ho⁴⁵ tau²¹ (tsai⁴¹).
 cup break TAU TSAI
 'The cup broke.'
 b. *pɛ³³tsi tsai⁴¹ p^ho⁴⁵.
 cup PROG break

In (10), both preverbal *tsai*²¹ and *tau*²¹... *tsai*⁴¹ are acceptable. There is some slight differences between the interpretations. In (10a), with *tsai*²¹, the action is presented as ongoing; in (10b), with *tau*²¹... *tsai*⁴¹, the sentence focuses on the continuation of the ongoing action. In (11a), *tsai*²¹ is not acceptable, while *tsai*²¹... *tsai*⁴¹ is acceptable in such a sentence (11b). The same is true in (12), where *tau*²¹... *tsai*⁴¹ is acceptable, while *tsai*⁴¹ is not. The observation in (10) is that the predicate *ɕi*⁴¹ 'wash' is an activity, while the predicate *k^hai*³³ 'open' in (11) is an accomplishment verb, and in (12) *p^ho*⁴⁵ 'break' is an achievement predicate. Again, the consideration is if the two are the same, there should be no such difference. Further examples are given in (13).

- (13) a. *xo²⁴tsi tsai⁴¹ kən³³.
 box PROG empty
 'Intended: the box is empty.'
 b. xo²⁴tsi kən³³ tau²¹ tsai⁴¹.
 box empty TAU TSAI
 'The box is empty.'

The adjective *kən*³³ 'empty' in (13) is a stative predicate used to describe the state of the subject, it is compatible with *tau*²¹... *tsai*⁴¹, but not with progressive marker *tsai*⁴¹. The sentences in (13a) and (13b) show that it is not sensible to treat *tau*²¹... *tsai*⁴¹ and *tsai*⁴¹ the same.

The above facts show that *tsai*⁴¹ and *tau*²¹... *tsai*⁴¹ are different: the former can be used in activities, indicating an ongoing action, while the latter can be used with types of eventive predicates, indicating the duration of a result state or continuation of an ongoing action. Note that *tsai*⁴¹ in the combination is only obligatory with activities; with accomplishment and achievement predicates, *tsai*⁴¹ can be left out.

Based on these observations, I suggest that verb final *tsai*⁴¹ is different from verb preceding *tsai*⁴¹. The preverbal *tsai*⁴¹ is the cognate of *zài* in Mandarin, indicating the ongoingness of an action, the *tau*²¹... *tsai*⁴¹ combination can indicate either the ongoingness of an action in some situations or the duration of a result state in some other situations. If that is the case, the immediate question is: What is the difference between preverbal *tsai*⁴¹ and *tau*²¹...*tsai*⁴¹ when they are used to indicate an ongoing action? I would delay the answer to the question till section 4.3.2. In the following analysis, I point out that there are two *tau*²¹s in the combination *tau*²¹... *tsai*⁴¹. One is a perfective marker and the other is a progressive marker.

4.2.2 *tau*²¹_{PERF} VS *tau*²¹_{PROG}

In this section, I point out that *tau*²¹ in the combination *tau*²¹... *tsai*⁴¹ can sometimes be treated as a perfective, the reading of the duration results from the derivation of the use of *tau*²¹ as a perfective marker. This is illustrated in (14a) - (14b).

- (14) a. ts^hɛ³³ tsi fan³³ tau²¹(tsai⁴¹) .
 car turn over TAU TSAI
 'The car turned over.'
 b. tɛŋ³³ lian²¹ tau²¹(tsai⁴¹) .
 light lighten TAU TSAI
 'The light is on.'

The verb *fan*³³ 'turn over' and *lian*²¹ 'lighten' are achievement predicates. *tau*²¹... *tsai*⁴¹ is acceptable in (14a, b). It would not be sensible to treat *tau*²¹ in (14) as a progressive marker since the main property of achievements is that they lack property of duration.

Still, note that the sentence final *tsai*⁴¹ in these two sentences can be left out. Hence the idea that *tau*²¹...*tsai*⁴¹ is exclusively a progressive marker is questionable.

Furthermore, that *tau*²¹ can be replaced by *lia*³³, the perfective marker in some cases like (14), repeated in (15), but not in other cases can support our doubt. For comparison, (4) is repeated in (16).

- (15) a. ts^hɛ³³ tsi fan³³ tau²¹ /lia³³ (tsai⁴¹).
 car fall TAU /PERF TSAI
 'The car turned over.'
 b. tɛŋ³³ lian²¹ tau²¹ /lia³³ (tsai⁴¹).
 light lighten TAU /PERF TSAI.
 'The light is on.'

- (16) a. ŋo⁴¹ lau³³ tau²¹ tiən⁴¹ si tsai⁴¹.
 1SG watch TAU TV TSAI
 'I am watching TV.'
 b. *ŋo⁴¹ lau³³ lia³³ tiən⁴¹ si tsai⁴¹.
 1SG watch TAU TV TSAI
 'Intended: I am watching TV.'

In (15a, 15b) both *tau*²¹ and *lia*³³ can be used without leading to differences in interpretation, but this is not for (16b). Note that in Xùpǔ, *lia*³³ can only be used as a perfective marker indicating the termination/completion of an action. As far as I know, it is the cognate of *le* in Mandarin. We therefore conclude that the *tau*²¹ appearing in the combination *tau*²¹... *tsai*⁴¹ is not always the same one. The facts presented above show that we are in fact dealing with two *tau*²¹s: one is a perfective marker (*tau*²¹_{PERF}), the other is used as a progressive marker (*tau*²¹_{PROG}). *tau*²¹_{PERF} can be used with achievement or accomplishment predicates to indicate that the action presented has been accomplished. In achievements and accomplishments the combination *tau*²¹_{PROG}... *tsai*⁴¹ is used to indicate the duration of the result state. In activities, the combination *tau*²¹_{PROG}... *tsai*⁴¹ is used to indicate the ongoingness of the actions. *tau*²¹ in Xùpǔ is like *ta*²¹ in Chángshā. They can be used as a perfective marker and a progressive marker as well. When they are used as a progressive marker, it must be combined with sentence final *tsai*²¹(*ko*²⁴) or *tsai*⁴¹.

If the above is on the right track, I conclude that, like the case of ta^{21} in Chángshā, there are two tau^{21} s in $tau^{21}...tsai^{41}$ combination, which happen to be the same form. One is a perfective marker; another is a progressive marker. The corresponding relation of the use of progressive and perfective aspect between Chángshā and Xùpǔ can be seen in table 1 (we neglect the preverbal $tsai^{41}$ in the two languages).

Table 1

	Chángshā	Xùpǔ
Perfective	ta^{21}_{PERF}	tau^{21}_{PERF} , lia^{33}
Imperfective	$ta^{21}_{\text{PROG}}...tsai^{41}$	$tau^{21}_{\text{PROG}}...tsai^{41}$

The table shows that the perfective marker tau^{21}_{PERF} in Xùpǔ corresponds to ta^{21}_{PERF} and the progressive marker tau^{21}_{PROG} corresponds to ta^{21}_{PROG} in Chángshā. The difference, however, between the two languages is that in Xùpǔ there are two perfective markers: lia^{33} and tau^{2110} , whereas in Chángshā there is only one. That is, ta^{21} . If the proposed analysis for $tau^{21}...tsai^{41}$ in Xùpǔ is on the right track, I think that it can be used to support my analysis of ta^{21} in Chángshā.

4.2.3 Summary

In the above, I provided an analysis of the expression of the progressive aspect in Xùpǔ. I first point out that preverbal $tsai^{41}$ and the combination $tau^{21}...tsai^{41}$ is not the same as it is previously argued to be. The progressive marker, preverbal $tsai^{41}$, expresses that an action is ongoing; while the combination $tau^{21}...tsai^{41}$ cannot only indicate that an action is ongoing, it can also indicate the continuation of a result state. I also point out that the combination is only obligatory in activities. In accomplishments and achievements, $tsai^{41}$ is optional. I argue that tau^{21} in the combination $tau^{21}...tsai^{41}$ can be divided into

¹⁰ Note that as perfective marker, tau^{21} can only be used with activities, not with achievements and accomplishments, while the perfective marker lia^{33} is able to be used with all types of eventive predicates.

$\tau\alpha u^{21}_{\text{PERF}}$ and $\tau\alpha u^{21}_{\text{PROG}}$ with the duration reading of result state being derived from the perfective. Based on the similarities between $\tau\alpha u^{21}$ in Xùpǔ and $\tau\alpha^{21}$ in Chángshā, I conclude that the combination of $\tau\alpha u^{21} \dots \tau\text{sa}^{41}$ can be used to support my analysis of $\tau\alpha^{21}$ in Chángshā. In what follows I provide facts and some historical texts from Mandarin to further support the proposed analysis.

4.3 *zhe* in Mandarin

In Chapter 1, we have introduced that *zǎi* and *zhe* are seen as two imperfective markers in Mandarin. The two are distinguished in dynamicity. Specifically, *zǎi* indicates ongoingness of an action. *zhe* indicates the ongoingness of an action or duration of a result state. I have also pointed out, in the spirit of Tsai (2008), that *zǎi* is located in an Outer aspect position and *zhe* occupies an inner aspect position. As a result (according to the principles developed in Chapters 1 and 2), *zǎi* can stand alone in a sentence to present an action as ongoing, this is not the case for *zhe*: when *zhe* is used, extra elements are needed to anchor the sentence to tense.

However, this is not the whole story of the use of *zhe*. In this section, I am going to provide more analysis of the distribution and interpretation of *zhe*. I am going to show that *zhe* should not be exclusively treated as an imperfective marker. We have in fact two *zhes*. One is *zhe*_{PERF} and the other is *zhe*_{PROG}. The duration reading encoded by *zhe* has derived from the use of *zhe* as a perfective marker. In this sense, what Tsai deals with is only part of the properties of *zhe*.

4.3.1 *zhe*_{DUR/PROG} or *zhe*_{PERF/PROG}

For a start, I show that the use of *zhe* can be illustrated in (17), where *zhe* indicates ongoingness of an action or the continuation of a result state.

- (17) a. tā bù t ng de shuō zhe.
 3SG NEG stop SUB speak ZHE
 'He is speaking continuously.'

- b. tā qīngqīng de qīao zhe mén.
 3SG lightly knock DUR door
 'He is knocking at the door quietly.'
- c. wǒ kàn zhe shū ne.
 1SG read ZHE book SF
 'I am reading a book.'
- d. nǐ bú yòng zhàn zhe.
 2SG NEG necessary stand ZHE
 'You do not have to stand.'
- e. qiáng shàng guà zhe yí fù huà
 wall on hang ZHE one CL picture.
 'There is a picture hanging on the wall.'

In (17a) - (17c), *zhe* indicates the ongoingness of the actions, while in (17d) - (17e), *zhe* indicates the continuation of the result state. To deal with the ambiguity between a dynamic progressive reading and a stative result state reading produced by *zhe*, three approaches have been advocated in the literature. One analysis claims that *zhe* is a stative durative marker (Li & Thompson 1981, Dai 1991, Shi 1992 among others). Yeh (1993) suggests that *zhe* is only compatible with stage-level predicates, which involves a change of state (Yeh 1993:86). Smith (1997:273) claims, "*zhe* basically presents a continuous and stable situation without regard to endpoints."

Another approach argues that *zhe* has two different meanings, indicating either the ongoingness of an action or the duration of a state resulting from the action denoted by the verb (Zhū 1982, Liú 1985, Lù 1995, 1999, Guo (1997), Chen 1999 among others.)

Lù (1999:5) suggests that *zhe* indicates either the ongoingness of an action or the duration of the result state. He points out that the use of *zhe* as a progressive marker can be further divided into two: one is to indicate the dynamic continuation as in (17a). Another is the repetition of the action, as in (17b). The meaning of the duration of states can also be further divided into two: one is to indicate the duration of a posture (see (17c)), another is to indicate the duration of the result state after an action (as in (17)).

As (17) shows, *zhe* does not only indicate the ongoingness of an action (17a) - (17c), it can also indicate the duration of the result states (17d) - (17e). Therefore, it seems to make sense to take the second approach: *zhe* is divided into *zhe_{DUR}* and *zhe_{PROG}*, with the former indicating the duration of a result state and the latter indicating the ongoingness of an action. Note that in Lù (1999), *zhe_{DUR}* and *zhe_{PROG}* are only subdivision of the use of *zhe* as an imperfective marker. It is still seen as an outer aspect marker as *zǎi* is.

Different from the above two approaches, Tsai (2008) notices that *zhe* is different from *zǎi* in that *zǎi* can stand alone while *zhe* cannot. I have introduced Tsai (2008) in chapter 2. I repeat briefly the observation by him. Tsai (2008) observes that when *zhe* is used, the sentence needs to be licensed by extra elements, which according to him, function to anchor the sentence to tense. Examples in (18) - (19) have been introduced in chapter 2; they are repeated here for convenience (from Tsai 2008: 676). The symbol % marks "incompleteness": the argument structure is fully-fledged, yet the sentence sounds incomplete.

- (18) a. %Akiū pǎo zhe.
 Akiu run DUR
 b. Akiū zǎi pǎo.
 Akiū PROG run
 'Akiu was/is running.'
 c. Akiū yǐhí pǎo zhe .
 Akiu continuously run DUR
 'Akiu was/is running continuously.'

- (19) a. %Akiū kū zhe.
 Akiu cry DUR
 b. Akiū zǎi kū.
 Akiu PROG cry
 'Akiu was/is crying.'
 c. Akiū kū zhe huí lái .
 Akiu cry DUR back come
 'Akiu came back home crying.'

Tsai (2008) observes that *zhe* cannot stand alone in these sentences (18a) - (19a), while in the same case, *zài* can (18b) - (19b). He attributes the incompleteness of the sentences to the location of *zhe*. He suggests that *zhe* is located in what he calls a Middle aspect position inside vP (a position lower than little v, i.e., inner aspect for us), while *zài* is located in the outer aspect position. According to him, since *zhe* is located lower than vP, it is unable to move up to join T, leaving the tense of the sentence too weak to bind the event role. Hence, other elements are needed to help anchoring the sentence to tense. These elements include adverbs as shown in (17c). The sentence itself can also be embedded in a bigger sentence (as is done in (19c)). This property of *zhe* is contrastive with the progressive marker *zài* (18b) - (19b).

However, we think that the approach Tsai (2008) proposed is subject to further modification. It is true that when *zhe* is used to indicate the continuation of an ongoing action, it needs other elements to go with it, but in cases where *zhe* is used to indicate the duration of a result state, no extra elements is needed. See (20).

- (20) a. qí ángshàng guà zhe yí fù huà
 wall on hang ZHE one CL painting
 'On the wall hangs a painting.'
- b. qí ángshàng yǒu yí fù huà guà zhe.
 wall on have one CL painting hang ZHE
 'There is a painting hanging on the wall.'

In (20a), no extra elements is used, *zhe* indicates the duration of the result state. Tsai suggests that sentences like that can be seen as an existential construal. (20a) can be changed into (20b). That is why no extra elements is needed.

However, we think this can only explain sentences with locative inversion. In many other cases where *zhe* indicates result state without extra elements, the sentences cannot be interpreted as existential. See (21).

- (21) Zhangsan dāi zhe màozi.
 Zhangsan wear DUR hat
 'Zhangsan is wearing a hat.'

zhe in (21) indicates the duration of the result state, it stands alone in the sentence. Note that according to Tsai (2008), we should either interpret (21) as a case of existential or we use other elements to anchor the sentence to tense. However, this is not the case.

Still there are sentences like (22) which should also not be seen as an existential case, only a definite reading is acceptable for.

- (22) mén kāi zhe.
 door open ZHE
 'The door is open.'

So given the above consideration, we think it is better to treat the use of *zhe* in cases like (21) - (22) as a perfective marker, with the durative reading being derived from the completion of an action, as we have argued in chapter 2.

To close this section, I would like to point out that treat *zhe* as a perfective marker is not new here. Cheng (1988) points out that *zhe* indicates a state and that the action needed to reach the state is finished, that is, there is an endpoint of the state indicated by *zhe* (Cheng 1988:74). For example in (23), Lisi must have completed the action of picking up the clothes before the state of holding is reached. (23) is from Cheng (1988:74).

- (23) Lisi bǎ zāng yīfú bào zhe.
 Lisi BA dirty clothes hug ZHE
 'He is holding the dirty clothes.'

Similarly, Sun (1998) points out that *zhe* in (24) cannot be understood as an imperfective marker. (24) is from Sun (1998:157).

- (24) zhè ge chá nǐ hē zhe zěnmeyàng?
 DEM CL tea, 2SG drink ZHE how
 'You have drunk this tea, how is it?'

According to Sun (1998), in (24), one cannot possibly talk about the taste unless he/she has taken the tea. Therefore, *zhe* in (24) cannot possibly mark an

imperfective aspect. *zhe* in (24) signals perfect aspect, which indicates a present state which is the result of some past situation (Comrie (1976:56)). According to Comrie (1976), perfect manifests the present relevance of a past situation. Following Comrie, Sun suggests that *zhe* in (24) signals a current relevance, i.e. the relevance of the event of tea drinking in relation to the situation at speech time. I assume Sun is right in pointing out that *zhe* in (24) is not an imperfective marker, but I would point out that *zhe* in (24) can in fact be interpreted as a perfective marker. Since as is mentioned by Sun that only one has drunk the tea, can one talk about the taste of the tea. In this sense, *zhe* in (24) can be seen as a perfective marker.

In talking about the use of *zhe*, Smith (1997) points out that there must be a potential for change in the use of *zhe*. Verbs or verb phrases denoting relatively permanent states cannot occur with *zhe*. Yeh (1993) suggests that *zhe* is compatible with stage-level states, such as, *bēishāng* 'sad', *hàipà* 'afraid', *máng* 'busy', etc. are incompatible with individual-level states, such as *xìàng* 'to resemble', *cōngmíng*, 'smart' etc. Importantly she points out that *zhe* goes with result states and stage-level state predicates can be seen as involving a change, from, say, being not busy to being busy. Both Smith and Yeh treat *zhe* as a stative durative marker, yet I think that for these predicates with *zhe* to mean what they mean, a change must take place. It is *zhe* that expresses that this change has taken place. In this sense, *zhe* is better treated as a perfective marker.

Treating *zhe* in these verbs as a perfective marker is not impossible. One argument to support the analysis is that in these sentences both *zhe* and *le* (a perfective marker) can be used, without leading to much difference in temporal information.

- (25) a. *zhuōzi shàng fàng zhe/le běn shū.*
 desk on put ZHE/le CL book
 'A book is put on the desk.'
- b. *tā chuān zhe/le yí jiàn dàyī.*
 3SG wear ZHE/le one CL clothes
 'He put on a coat.'

- c. ménkǒu zhàn zhe/le hěnduō rén .
 door stand ZHE/le many people
 'Many people stood at the door.'

In (25), both *zhe* and *le* can be used. The interpretation of the sentences is basically the same.

In short, we suggest that it makes a lot of sense to treat *zhe* as a perfective marker in some situations. The duration reading of the sentence can be seen as being derived from the completion of the action: the action is completed and the result state created by the action continues. We assume that it is the property of these predicates: they do not only denote an action, but also a result state after the completion of the action. Verbs expressing *holding*, *placement*, *posturing*, and *attachment* (e.g. *hang*) etc belong to this type. Note that other verbs like *do*, *watch*, *write*, *wash*, *see*, *beat* etc. do not show this property. Since we see result states as part of the properties of these verbs, we think that it is understandable that after the completion of an action, the result state stays.

Based on the above considerations, I suggest that the preferred subclassification of *zhe* is *zhe*_{PERF}/*zhe*_{PROG} rather than *zhe*_{DUR}/*zhe*_{PROG}. Specifically, in result states, *zhe* is really a perfective marker: the durative reading of the result state is derived from the completion of the action. In other cases, it is used as a progressive marker indicating the ongoingness of an action. In what follows, I point out the differences between *le* (another perfective marker) and *zhe*_{PERF} and that between *zài* and *zhe*_{PROG}.

If the above analysis so far is on the right track, we suggest that there are two perfective markers in Mandarin: *zhe*_{PERF} and *le*, and two progressive markers: *zhe*_{PROG} and *zài*. If that is the case, the immediate questions rise: what properties does *zhe* have as a perfective marker? What is the difference between *zhe*_{PERF} and *le*? In what follows, we focus on the properties of *zhe*_{PERF}. I have mentioned the differences between *zài* and *zhe*_{PROG} as a progressive marker. However, for the purpose of comparison, I will mention them again here.

4.3.2 *le/zhe*_{PERF}

In this section, I suggest that as a perfective marker, *zhe*_{PERF} is more restricted than *le*. The distinctive property of *zhe* regulates that *zhe* can only be used in verbs that have end states typically resulting from the action. Verbs that can only denote an action do not accept *zhe* as a perfective marker. We compare (26a) and (26b). *zhe* in (26a) can only be a progressive marker, while in (26b), it can either be a perfective or a progressive marker.

- (26) a. t à z ǎi n àr kū zhe_{prog}/ *zhe_{perf} .
 3SG LOC there cry ZHE_{PROG}/ ZHE_{PERF}
 'He is crying there.'
 *'He cried there.'
- b. t à z ǎi qí ángsh àng tiē zhe_{PROG}/ zhe_{PERF}/le zhàopiān.
 3SG LOC wall attach ZHE_{PROG}/ ZHE_{PERF}/LE picture
 'He is attaching pictures on the wall.'
 'He attached pictures on the wall.'

zhe in (26a) can only be a progressive marker, while in (26b), it can have either a progressive reading or a perfective reading. When it is interpreted as a perfective marker, it can be replaced by *le*.

In comparison to *zhe*, *zǎi* is less controversial. Li and Thompson (1981:217) suggest that only activity verbs can take *zǎi* to indicate the progressive aspect. Following Li and Thompson, Smith (1997) claims that "*zǎi* presents an internal interval of a durative situation, and often has the connotations of activity associated with events" (Smith 1997:273). However, Wú (2004) points out that Smith's generalization misses an important point about *zǎi*: *zǎi* presents an event as ongoing at an instant while *zhe* presents an eventuality lasting over an interval larger than an instant (Wú 2004:320). (27) - (28) is from Wú (2004:320).

- (27) a. *tā zuótiān xiàwǔ wǔdiǎn k àn zhe di ànsh ì
 3SG yesterday afternoon five o'clock watch ZHE TV
 'He was watching TV at 5:00 last afternoon.'

- b. tā zuótiān xiàwǔ wǔ diǎn zài kàn diànshì.
 3SG yesterday afternoon five o'clock ZAI watch TV
 'He was watching TV at 5:00 last afternoon.'

- (28) a. tā zhěng gè zǎoshàng kàn zhe diànshì
 3SG whole CL morning watch ZHE TV
 'He was watching TV the whole morning.'
 b. *tā zhěng gè zǎoshàng zǎi kàn diànshì
 3SG whole CL morning ZAI watch TV
 'He was watching TV the whole morning.'

Sentences in (27) and (28) show, *zhe* is compatible with an interval adverbial (28a), but not with an instant adverbial (27a); on the other hand, *zǎi* can only go with an instant adverbial (27b), but not with an interval adverbial (28b) (Wú 2004:319).

Different from the above semantic analysis, Tsai (2008) holds that *zhe* and *zǎi* differ in the syntactic location as is introduced in chapter 2. Note that I have distinguished *zhe*_{PERF} from *zhe*_{PROG}. So when I refer to distinguishing between *zhe* and *zǎi*, I confine myself to *zhe*_{PROG}.

With the above analysis, and following Tsai (2008) and Wú (2004), I assume that *zhe*_{PROG} and *zǎi* differ not only semantically but also syntactically. Specifically, *zǎi* is located in outer aspect position and *zhe*_{PROG} is located lower than vP, though both are used to indicate ongoingness of an action.

In the above, we postulate that *zhe* in result states can be seen as a perfective marker, with the reading of the duration of the result state being derived from the completion of the action. Hence, we have *zhe*_{PERF} and *zhe*_{PROG}, rather than the *zhe*_{DUR} and *zhe*_{PROG} we find in the literature. *Zhe*_{PERF} is used to indicate completion, and *zhe*_{PROG} is used to indicate the ongoingness of an action. When used as a perfective marker, *zhe*_{PERF} can only be used with those predicates that denote not only actions but also the state that typically results from the action. This is different from *le*, another perfective aspect marker, that can be used in any eventive predicates. As a progressive marker, *zhe*_{PROG} is different from preverbal *zǎi* in the sense that it cannot stand alone in a sentence.

When *zhe* is used to present an action as ongoing, the sentence needs to be tense anchored externally (Tsai 2008).

If so far I am on the right track, the questions I put forward in section 4.3.1 can be accounted for: *zhe*_{PROG} is located lower than vP, hence unable to help anchor the sentence to tense, that is why it cannot stand alone. *zhe*_{PERF}, though located lower than vP, is interpreted in outer aspect position, as *ta*²¹_{PERF} is, it is able to help the sentence anchor to tense, hence *zhe*_{PERF} can stand alone.

4.3.3 Summary

In this section, I provided an analysis on the distribution and interpretation of *zhe*. I show that *zhe* should not be exclusively treated as an imperfective marker. *zhe* in fact can be divided into *zhe*_{PERF} and *zhe*_{PROG} with the reading of the duration of the result state produced by *zhe* being derived from the use of *zhe* as a perfective marker.

4.4 *ta*²¹ and *zhe*

In this section, I will further point out that the assumed distinction between *zhe*_{PERF} and *zhe*_{PROG} in Mandarin corresponds to *ta*²¹_{PERF} and *ta*²¹_{PROG} in Chángshā, and what is different between the two languages is that in Mandarin both *zhe* and *le* can be used as perfective markers ((a) sentences), while in Chángshā only *ta*²¹ does the job ((b) sentences). See (29) - (32).

- (29) a. zhuōzi shàng fàng le/zhe_{PERF} yī běn shū.
 desk on put PERF one CL book
 'There is a book on the desk/ A book is placed on the desk.'
- b. tso²⁴zi shan²¹ fan⁴⁵ ta²¹ i²⁴ pən⁴¹ xu³³.
 desk on put PERF one CL book
 'There is a book on the desk/A book is placed on the desk.'

- (30) a. *tāmēn zài n áli g ǎ zhe_{PROG} /le l ǒuf àng.*
 3PL LOC there build PROG /PERF building
 'They are building buildings there/They have built buildings there.'
- b. *ta³³ mən tsai²¹ la⁴⁵ li kai⁴⁵ ta²¹ fan¹³ tsi.*
 3PL LOC there build PERF/PROG building
 both: 'They are building buildings there/They have built buildings there.'
- (31) a. *Zhāngsān hěn bù q íngyu àn de xǐ zhe_{PERF}/le yī fú.*
 very NEG willing SUB wash PROG/PERF clothes
 both: 'Zhangsan is washing the clothes unwillingly/Zhangsan washed the clothes unwillingly.'
- b. *tsan³³ san³³ xǎ⁴¹ pu⁴¹ ts^h in¹³ iuan²¹ ti ǒi⁴¹ ta²¹ i³³ fu²¹.*
 very NEG willingly SUB wash PERF/PROG clothes
 both: 'Zhangsan washed the clothes unwillingly/Zhangsan is washing the clothes unwillingly.'
- (32) a. *tāmēn z ǎ shuō zhe hu à*
 3PL PROG speak PROG words
 'They are talking.'
- b. *tāmēn tsài kan⁴¹ ta²¹ fa²¹.*
 3PL PROG speak PROG words
 'They are talking.'

Sentences in (29) contain a *place* verb; both *zhe* and *le* are acceptable as a perfective marker; in Chángshā only *ta²¹* is used. In (30), the sentences are modified by a locative adverb, and in (31) they are modified by a manner adverb, we see that in Mandarin both *zhe* and *le* are acceptable in these two cases, the actions in the sentences are presented as either having been completed or ongoing. In Chángshā, however, *ta²¹* alone does the two jobs. In (32), only ongoing reading is available for the sentence, which is expressed by *zhe* in Mandarin, the same is true in Chángshā, where this is expressed by *ta²¹*.

To sum up, in the above I have shown that where *zhe_{PERF}/le* is used in Mandarin, *ta²¹* is used, and where *zhe_{PROG}* is used, *ta²¹_{PROG}* is used in Chángshā. The corresponding relation between *ta²¹* and *zhe* is presented in Table 2.

Table 2

Dialects	Perfective	Progressive
Chángshā	ta ²¹	ta ²¹ , tsai ⁴¹
Mandarin	zhe, le	zhe, zǎi

If so far our analysis is still on the right track, we say that the use of *zhe* in Mandarin can also support the proposed analysis of *ta*²¹ in Chángshā.

In what follows, I point out that the proposed analysis can be further supported from the historical relations between the different varieties of *zhe* in Chinese.

4.5 Historical relations between *zhe* and *ta*²¹

In this section, I turn to the historical development of *zhe* and *ta*²¹, as well as the historical relationship between Chángshā and Mandarin. I will show that the proposed analysis so far can be further supported by historical relations between the two.

4.5.1 The development of *zhe* in Mandarin

By examining various uses of *zhe*'s cognates in different varieties of modern Chinese and in historical texts, Sūn (1998) suggests that the imperfective *zhe* may arise from its use as a directional verb in Middle Chinese. Following Heine et al. (1991) and Bybee et al. (1994), he claims that *zhe* conforms to the cross-linguistic generalization, according to which temporal markers are frequently grammaticalized from spatial terms. Sun imagines the development of *zhe* as follows: *zhe* was initially grammaticalized into an imperfective marker in Middle Chinese from a directional verb, whereby the resultative and other aspectual meanings arose as a consequence of contextually induced semantic changes (Sūn 1998:153).

According to Sūn, the semantic change from a directional verb into an imperfective aspect marker that focuses on the result state can be explained using Mandarin. (33) is from Sūn (1998:160).

- (33) a. zǒu xià qù!
 walk down go
 'Walk on!'
 b. shuō xià qù!
 talk down go
 'Continue to talk!'

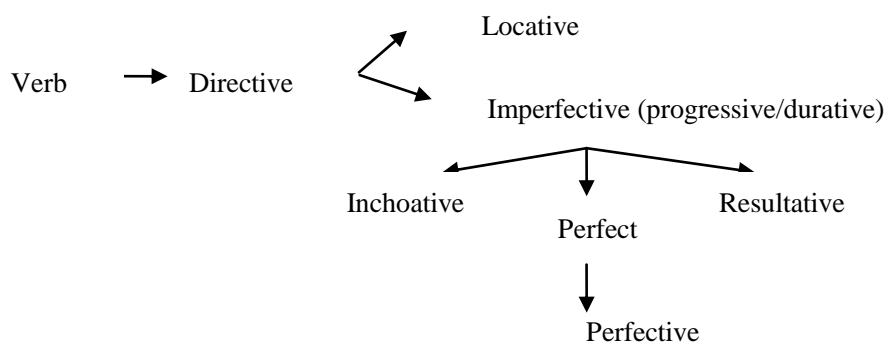
Sūn (1998) points out that the meaning of direction in (33a) *zǒu xià qù* 'walk on' is very strong. However, with verbs like *shuō* 'speak' in (33b), the meaning of direction has become much weaker, and more metaphorical. Sūn (1998) suggests that the meaning of the directional *xià qù* 'go down' has changed so that the emphasis is no longer on the direction.

Sūn points out that, "although *zhe*'s perfect-aspect function in Mandarin is limited to expressions such as the one in (24), in other modern Chinese dialects, *zhe*'s cognates are commonly used as perfective markers (Sun 1998:157) (we interpret it a perfective marker, as mentioned above). For instance he says that *ta*²¹ in (34) marks perfective aspect.

- (34) ta⁴¹ ta²¹ tian⁴⁵ xua²¹ tçiu²¹ xui¹³ k^hə⁴⁵.
 make PERF phone then return
 'I will return after I have made the phone-call.'

Sūn (1998:157) holds that the cognates of *zhe* used as a perfective marker can be observed from other dialects like Xiāng, Mǐn and Wú, as well as from the historical texts of middle Chinese. The history of the grammaticalisation of *zhe* is illustrated in (35). (35) is from (Sūn 1988: 171).

(35)



(35) shows that *zhe* evolved into a perfective marker from a lexical verb, during the path of development, it has undergone the change from a lexical verb to a directional verb, then it was used to indicate location or imperfective aspect before it is used as perfective.

4.5.2 The development of *ta*²¹

Sūn (1998) claims that *ta*²¹ is one of the cognates of *zhe*. According to him, *ta*²¹ in Xiāng can mark both the perfective and the perfect. We have seen (34), (36) from Sūn (1998:157) is for further illustration.

- (36) tɕia²⁴ ta²¹ fan²¹ ta²¹.
 eat PERF meal SFP
 '(Someone) has eaten.'

Sūn (1998:157) holds that "... the meaning of *ta*²¹ as a perfective comes from the perfect aspect which, in turn, might derive from the post verbal directive/locative in Middle Chinese". According to Sūn, *ta*²¹ in (36) probably comes from *zhe* and is most appropriately translated into modern Mandarin by a directional *xi àl āi* 'go down'. Hence, (37a) can be translated into *zu ò xi àl āi* 'sit down to eat'.

- (37) a. tsuo²¹ ta²¹ tɕ^hia²⁴.
 sit TA eat
 'Sit down to eat.'
- b. t^ha³³ liu¹³ ta²¹ tɕi⁴¹ k^huai⁴¹ tɕian¹³ tsai²¹ ko²⁴li.
 3SG leave TA several CL money LOC here
 'He left several dollars here.'

In Sūn (1998), *ta*²¹ in (37b) is equivalent to *ta*²¹ in (37a), with the same directional meaning. Sūn holds that the grammaticalization process of *zhe* and its cognates in Chángshā in Middle Chinese is characterized as in (38) (Sūn 1988: 169). Sūn (1998) also discusses languages such as Mǐn and Wú, which I do not consider further here.

(38)

	MC (zhe)	Changsha (<i>ta</i> ²¹)
Locative	(+)	-
Directive	+	+
Progressive	+	-
Imperfective	+	+
Inchoative	(+)	+
Perfect ¹¹	(+)	+
Perfective	(+)	+

Looking at (38), *ta*²¹ in Chángshā seems to have undergone almost the same process as *zhe* in Mandarin, with two notable exceptions: the progressive and the locative. However, I point out that Sūn's description of *ta*²¹ is not comprehensive, because *ta*²¹ in Chángshā can be used as a locative and a progressive marker. This observation is also made by Cuī (1997), Wǔ (1999), Lǐ (1991), Lú (2007). See (39) - (40).

¹¹ Sun treats *zhe* as a perfect marker in sentences like (24), though I would say it can be seen as a perfective marker.

- (39) a. t^ha³³ tɕu²¹ ta²¹ Shang²¹hai⁴¹.
 3SG live LOC Shanghai
 'He lives in Shanghai.'
- b. *t^ha³³ tɕu²¹ ta²¹ tsai²¹ Shang²¹hai⁴¹.
 3SG live TA LOC Shanghai
- (40) ɲo⁴¹mən¹³ tsən⁴¹ kan⁴¹ ta²¹ xua²¹.
 1PL right speak PROG words
 'We are talking.'

*ta*²¹ is used as a locative in (39), and *ta*²¹ and the locative *tsai*²¹ cannot co-occur (39b). In (40), *ta*²¹ can be seen as a progressive or a durative marker in Cuī (1997), Wǔ (1999), Lǐ (1991), Lú (2007), although strictly speaking, I would argue that it is a progressive marker.

Before I close this section, I would mention another approach dealing with the historical development of *ta*²¹, which is given by Wǔ (1999). Wǔ is different from Sūn (1998). Wǔ suggests that *ta*²¹ originates from *tɛ*²⁴ 'to obtain; to gain'. Wǔ's analysis goes as follows. Before the occurrence of *le* in Chinese, *tɕia*³³ 'to lead, to send away' or *tɕ^hye*⁴¹ 'to take away' and *tɛ*²⁴ 'to obtain, to gain' are contrastive markers used during the Song and Yuan Dynasties as aspectual markers. Later, as the use of the two aspect markers *le* and *zhe* increased, *tɕia*³³ 'to lead; to send away'/'*tɕ^hye*⁴¹ 'to take away' vs *tɛ*²⁴ 'to obtain, to gain' gradually fell out of use in modern Chinese, and have not been used since the eighteenth century. Later, a verb *liǎu* 'to finish' developed into an aspectual marker and replaced most of the aspectual markers in modern Chinese. This is also the case in Mandarin. In Chángshā, however, the contrast has not only been retained but expanded (Wǔ 1999:215). Specifically, *ka*⁴¹ discussed in chapter 3 developed from *tɕ^hye*⁴¹ 'to take away' and *ta*²¹ derived from the word *tɛ*²⁴ 'to obtain, to gain' (Wǔ 1999:215). To put differently, the development path of *liǎu* 'to finish' from a verb to an aspectual marker does not occur in Xiāng. She suggests that "in Xiāng, although a few localities have adapted *le/liǎu* as an aspectual marker, it can be treated as a result of borrowing rather than of an internal development" (Wǔ 1999:225).

In the present thesis, however, I assume the analysis of the grammaticalisation of *zhe* in Mandarin and the relation between *zhe* and *ta*²¹ made by Sūn (1998). First, the analysis Sūn proposes for *zhe* finds support in dialects such as Xiāng, Wú, and Southern Mǐn and in historical texts.

Second, Sūn's analysis is based on a cross-linguistic phenomenon: there is a close semantic affinity between the locative and the progressive meanings. For instance, Heine et al. (1991:36) observe that in Dutch the locative preposition *aan* is used as a progressive marker.

- (41) Ik ben aan het eten.
 1SG am at the eat
 'I am eating.'

Finally, the most important argument is that the proposed analysis provides an insightful account of the aspectual overlap expressed by *zhe* in Mandarin and *ta*²¹ in Chángshā. By contrast, if *ta*²¹ is what Wǔ (1999) supposes to be, it would be hard to explain its function as a perfective, an imperfective and a locative as well, since these functions do not seem to be directly related to one another. In fact, Wǔ (1999) provides no discussion of the multiple functions of *ta*²¹.

Based on the above considerations, I follow Sūn's analysis and assume that *ta*²¹ is the cognate of *zhe*, which has gone through a grammatical transformation from a directive to an imperfective and perfective. What we see in Chángshā is in fact the relics of *zhe* in the process of the grammaticalization. This makes sense, since as I pointed out early in this thesis, Chángshā is known for inheriting some properties from Middle Chinese.

4.6 Summary

In Section 4.5, I present the historical development of imperfective aspects in Mandarin and Chángshā and the historical relationship between the two languages. Following Sūn (1998), I point out that *zhe* may arise from its use as a directional verb before it becomes an imperfective marker. However, different from Sūn, I point out that *zhe* can also be a perfective marker, mainly

used in result states and relevant predicates. I also point out, following Sun, that ta^{21} is one of the cognates of *zhe*. My analysis shows that the zhe_{PERF} and zhe_{PROG} that I recognize correspond to ta^{21}_{PERF} and ta^{21}_{PROG} . However, Chángshā differs from Mandarin in that *le* does not appear in this language (also see also Wu 1999). Hence, ta^{21} alone does the work that is performed by *le* and *zhe* in Mandarin.

4.7 Summary of chapter 4

In this chapter, I first provide an analysis of the imperfective aspect in Xùpǔ and Mandarin. Different from the traditional analysis, where $tau^{21} \dots tsai^{41}$ is seen as a durative marker, I point out that tau^{21} in the combination should be divided into two: tau^{21}_{PERF} and tau^{21}_{PROG} . tau^{21}_{PERF} can stand alone to indicate that an event has been completed, while tau^{21}_{PROG} cannot. When tau^{21}_{PROG} is used, the sentence needs to be combined with $tsai^{41}$, which is like sentence final $tsai^{41}ko^{24}$ in Chángshā. The use of tau^{21} is like what we have seen in the use of ta^{21} in Chángshā, where we argue that ta^{21} can be classified into ta^{21}_{PERF} and ta^{21}_{PROG} . Similarly, we can do this for tau^{21} : tau^{21} can be classified into tau^{21}_{PERF} and tau^{21}_{PROG} . We also pointed out that the proposed analysis of Xùpǔ and Chángshā can be extended to the use of *zhe* in Mandarin. We suggest that there also exists the distinction between zhe_{PERF} and zhe_{PROG} . Similarly, as a perfective marker, zhe_{PERF} is restricted to predicates that denote not only an action but also the result state after the action. When zhe_{PROG} is used as a progressive marker, the sentence needs external licensing, just as ta^{21}_{PROG} as we discussed in chapter 2. For a brief summary, the particles expressing the perfective and progressive in the three languages are presented in Table 3 (we neglect the preverbal $tsai^{41}/z\ddot{a}$ in the three languages). α represents those elements which need to be used to anchor the sentence in tense syntactically. For instance, it can be $tsai^{41}(ko^{24})$ in Chángshā and Xùpǔ.

Table 3

Aspect	Chángshā	Xùpǔ	Mandarin
Perfective	ta^{21}_{PERF}	$\tau a^{21}_{\text{PERF}}$, lia^{33}	zhe_{PERF} , le
Progressive	$ta^{21}_{\text{PROG...}} \alpha$	$\tau a^{21}_{\text{PROG...}} \alpha$	$zhe_{\text{PROG...}} \alpha$

Table 3 shows that Chángshā differs from Xùpǔ and Mandarin in the sense that the perfective and the imperfective are expressed by the same form, ta^{21} ; while in the other two languages the two meanings are expressed by distinctive markers: in Xùpǔ, the perfective is expressed by lia^{33} or $\tau a^{21}_{\text{PERF}}$, and in Mandarin, the perfective is expressed by le or zhe_{PERF} . The corresponding particle of ta^{21}_{PROG} is $\tau a^{21}_{\text{PROG}}$ and zhe_{PROG} respectively.

Chapter 5. Conclusion

In this chapter, I review some of the crucial claims made in this thesis. In this work I mainly discuss the morpho-syntax of aspect in Chángshā, one of the Xiāng varieties. I pointed out two important properties of aspect in Xiāng: one is that the aspectual particles are often combined; the other is that one particle is used to express more than one aspectual meaning. I focused on the distribution and interpretation of two particles used in the Chángshā dialect: ka^{41} and ta^{21} , and the fact that they often occur in combination $ka^{41} \dots ta^{21}$.

There are 4 sections in this chapter. In section 5.1, I review the theoretical frames that are used in my analysis. In section 5.2, I review the variation of the interpretation of ta^{21} in different contexts and the analysis I have proposed to account for the multifunction of ta^{21} . In section 5.3, I review the distribution and interpretation of ka^{41} and the proposed analysis for the use of ka^{41} and the $ka^{41} \dots ta^{21}$ combination. In section 5.4, I review the analysis of $tau^{21} \dots tsai^{24}$ in Xùpǔ, *zhe* in Mandarin and the relation between *zhe* and ta^{21} . In section 5.5, as a concluding thought, I discuss the relevance of the current proposal for aspect in Mandarin and topics for further research.

5.1 Tense and Aspect in Mandarin

In the present thesis, I assume that Mandarin is a tensed language as is proposed in Sybesma (2003, 2007). The value of tense needs to be specified through other elements, which can be temporal phrases, aspectual particles or other elements.

In Mandarin, different aspectual meanings are marked by different markers. Both outer aspect and inner aspect are structurally encoded. Following Sybesma (2017), I assume that one of the distinguishing properties of outer aspect in Mandarin is that the perfective aspect is located in Inner aspect position but interpreted in Outer aspect position. Another important feature of Inner aspect in Mandarin is that it is a three-layered structure: Asp3P, Asp2P and Asp1P. The three inner aspects are syntactically lower than little *v* and higher than VP. Asp3P is called Realization P, indicating whether an event

is realized. Asp1P, the lowest one in the structure, is called TelicityP, realized by fully lexical elements.

Aspect2P, lies in between Asp1P and Asp3P. According to Sybesma (2017), the main function of Asp2, if filled, is to block the event preceding the endpoint to be accessible to further syntactic operation. Take, for instance, *dì ào* 'off' in *nòng zāng diào le wǒ de yīfu* 'made my clothes dirty'. With *dì ào* 'off', the event cannot be presented in the progressive; while without it, it can, as in *tā zhèng zài nòng zāng wǒ de yīfu* 'He is making my clothes dirty.' Asp2P provides a structural way to distinguish achievements from accomplishments: they are not only different in terms of durativity, dynamicity and agentivity, they also are different structurally (Sybesma 2016).

Based on Sybesma (2017) and the observations I have made in Xiāng, I assume that the function of Asp2^o is not determined by whether it is filled or not, but on what it is filled with.

5.2 ta^{21} _{PERF}, ta^{21} _{PROG}

In chapter 2, I provided an analysis to account for the fact that one particle is used to indicate more than one aspectual meaning. Specifically, ta^{21} can be used as a perfective marker as well as as a progressive marker. The two readings vary according to the context. I observe that ta^{21} can be used as a perfective marker with any non-stative predicates without any extra conditions. In contrast, if ta^{21} is used as a progressive marker, other elements must accompany it; otherwise the sentence is ungrammatical. In order to interpret the conditions in which ta^{21} can be used as a progressive marker, I investigated the contexts in which this reading is possible. See (1a) - (1d), where different types of contexts in which ta^{21} is used as a progressive marker are presented.

- (1) a. [NEG+V+ ta^{21}]
 b. [manner/ locative/ instrumental adverb+ ta^{21}]
 c. [$tsai^{21}ko^{24}$ +V+ ta^{21}]
 d. [V+ ta^{21} + $tsai^{21}ko^{24}$]

In (1a) - (1d), ta^{21} can be a progressive marker. To explain the fact that ta^{21} can be used as either a perfective or a progressive marker, I first explored the possibility that ta^{21} is a perfective marker and that the progressive and the duration reading are derived from the contexts. However, this turned out to be an impossible position. Subsequently, I argued that there are two forms of ta^{21} , with ta^{21}_{PERF} indicating that an event is completed or terminated, and ta^{21}_{PROG} indicating that an action is ongoing or continuous. (The duration reading is derived from its use as a perfective marker: the action is completed, the result state created by the action is left there.)

To provide an account for the distribution and interpretation of ta^{21} , I introduced Sybesma (2017). In Sybesma (2017), the perfective marker *le* is located not in Outer aspect position, but in Inner aspect position, and is interpreted in Outer aspect position. In the same line of Sybesma (2017) arguing for Mandarin, I assume that ta^{21}_{PERF} in Chángshā is also located in an Inner aspect position, but interpreted in Outer aspect position.

In this part of the analysis, I also adopted insights from Tsai (2008), who argues that tense anchoring is a process of licensing an event argument. Importantly, in tensed languages with tense morphology, anchoring the event argument through tense is the default, while in languages without tense morphology, the process of tense anchoring can be done through the interaction between tense and outer aspect, or other semantic ways. In Mandarin, the tense, according to Tsai (2008), is weak, hence needs to be strengthened. To anchor an event to tense, aspect elements in outer aspect can move up to join T to anchor an event to tense. Otherwise other semantic means are used. For instance, event quantification, negators, modality or other operators can be used to bind an event variable. Tsai further assumes that only elements in Outer aspect position can move up to join T to anchor a sentence to tense, others, which are lower than little *v* cannot.

Basing myself on Tsai (2008), I proposed that ta^{21}_{PERF} is like *le* in Mandarin. However, as regard to its location, I am in line with Sybesma's (2017) analysis, in assuming that it is located in Asp3, in Inner aspect, but is interpreted in Outer aspect. Since it is interpreted in Outer aspect position, it is able to help the event anchor to tense. Also, I assume that ta^{21}_{PROG} is located in Asp2 (indicating that an event is ongoing).

Under the above assumptions, it is clear that there is a difference between ta^{21} as a perfective marker in some cases, and a progressive marker in some other cases. The difference between ta^{21}_{PROG} and ta^{21}_{PERF} lies in the fact that they are located in different syntactic positions. ta^{21}_{PERF} is located in Asp3, with a connection to Outer aspect, from which it can help an event to anchor to tense, while ta^{21}_{PROG} , is in Asp2, lower than ta^{21}_{PERF} , and consequently too deeply embedded in Inner aspect, to be able to do the same, and needs other material to help out. This approach can explain why ta^{21}_{PERF} can stand alone while ta^{21}_{PROG} always needs other elements to accompany it.

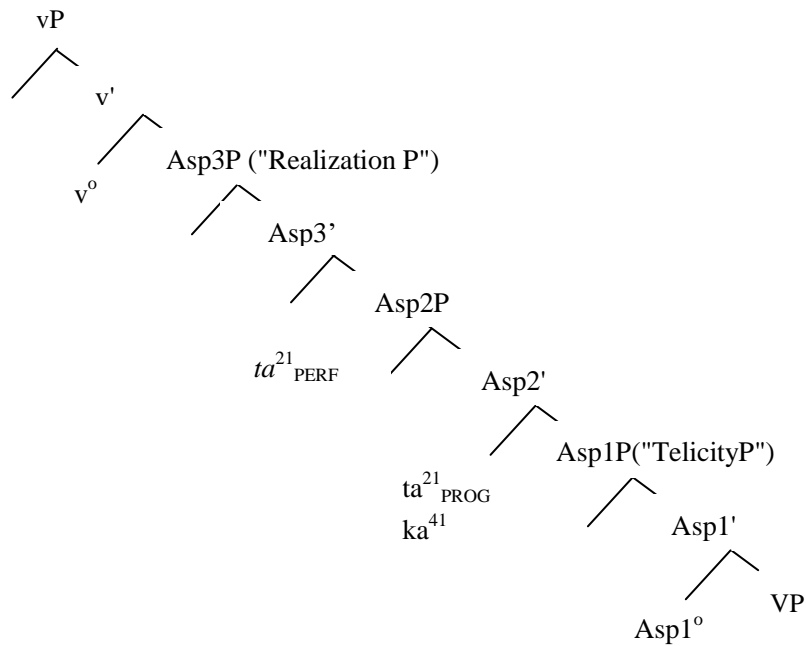
5.3 The distribution and interpretation of ka^{41}

In chapter 3, I explored the distribution and interpretation of ka^{41} in Chángshā. I first showed the different contexts in which ka^{41} is used. I showed that in some cases with an inherent endpoint, ka^{41} is obligatory. I also showed that in some other cases, the use of ka^{41} will result in variation of the interpretation of a sentence.

After that, I made a reanalysis of the interpretation of ka^{41} , pointing out that descriptively ka^{41} is used to double an endpoint in a telic event though sometimes the endpoint is implicit. To explain the use of ka^{41} , I refer to Sybesma (2017), where the inner aspect of Mandarin is a three-layered structure. The main reason is that ka^{41} shares the function that Asp2 has. For instance, ka^{41} always appear in telic events, sentences with ka^{41} cannot be put in the progressive, while without ka^{41} , this is unproblematic. Based on Sybesma (2017), I proposed that like ta^{21}_{PROG} , ka^{41} is also located in Asp2 position. The function of ka^{41} is to block the event preceding the endpoint from undergoing further syntactic operations (like the progressive).

At the end of the analysis, I presented a four-layered aspectual system in Chángshā, as shown in (2).

(2)



In (2), there are four layers of aspect: one outer aspect and three Inner aspects: Asp3P is RealizationP, indicating whether the endpoint has been reached or not. As to Asp2P, its function varies. If it is filled by ka^{41} , then the process of preceding an endpoint projected in an event is not available to participate in further syntactic operation. But if it is filled by ta^{21}_{PERF} as is mentioned in chapter 2, then, quite the opposite happens, as it then indicates that an event is ongoing. Asp1P, or Telicity P, is occupied by lexical predicative elements, denoting the endpoint of the event. This is all illustrated in (3), with ka^{41} doubling the endpoint in (3ai) and the result is definitive, with the result of blocking further syntactic operations targeting the event, as is shown in (3b). Without ka^{41} this is all exactly the other way around, as shown in (3aii) and (3c).

- (3) a. t^ha³³ ɕi⁴¹ kan³³tɕin²¹ (ka⁴¹) ta²¹ i³³fu⁴¹.
 3SG wash finish KA PERF clothes
 (ii) With *ka*: 'He has washing the clothes clean.'
 (ii) Without *ka*: 'He has washed the clothes (not necessary
 cleaned/completed).'
- b. *t^ha³³ tsai²¹ko²⁴ ɕi⁴¹ kan³³tɕin²¹ ka⁴¹ i³³fu⁴¹.
 3SG PROG wash clean KA clothes
- c. t^ha³³ tsai²¹ko²⁴ ɕi⁴¹ kan³³tɕin²¹ i³³fu⁴¹.
 3SG PROG wash clean clothes
 'He is washing the clothes clean.'

5.4 $\tau^{21} \dots tsai^{41}$ in Xùpǔ and *zhe* in Mandarin in support of ta^{21}_{PROG} and ta^{21}_{PERF}

In chapter 4, I mainly argued that the proposed analysis of ta^{21}_{PROG} and ta^{21}_{PERF} in Chángshā can be further supported by three piece of evidence. They are: (i) the use of $\tau^{21} \dots tsai^{41}$ in Xùpǔ; (ii) the multifunctionality of Mandarin *zhe*; and (iii) the grammaticalization path of *zhe*. I started from the introduction of $\tau^{21} \dots tsai^{41}$. In the previous literature, $\tau^{21} \dots tsai^{41}$ has been argued to be a progressive marker (Hè 1997, Qú 2007). Hè (1997) argues that the combination is used to indicate ongoingness of an action. There is no great difference between the preverbal $tsai^{41}$ (a progressive marker) and the $\tau^{21} \dots tsai^{41}$ combination; both are used to indicate progressive meaning. However, I notice that the combination of τ^{21} and $tsai^{41}$ can only be used in activities to indicate an ongoing action, while with achievement and accomplishment predicates, the combination does not produce the meaning of ongoingness but the completion of an action. I argued that τ^{21} in the combination can be divided into τ^{21}_{PERF} and τ^{21}_{PROG} , with τ^{21}_{PERF} indicating the completion of an action, and τ^{21}_{PROG} indicating that an action is ongoing. I further pointed out that the multifunctionality of τ^{21} can be used to support my analysis of ta^{21} , which is used to express either the perfective or progressive meaning, as we just saw. The case of $\tau^{21} \dots tsai^{24}$ is like $ta^{21} \dots tsai^{21}ko^{24}$ in Chángshā, with $tsai^{21}$ being a present tense operator, similar to $tsai^{21}ko^{24}$.

I then introduced the multifunctional *zhe* in Mandarin. The interpretation of *zhe* is quite a controversial issue in the literature. Some argue that *zhe* is a duration marker indicating the continuation of a result state (Smith 1997, Yeh 1993, Zhū 1981 etc). Others argue that *zhe* should be divided into *zhe*_{PROG} and *zhe*_{DUR}. However, different from the above, I suggest that *zhe* is better divided into *zhe*_{PROG} and *zhe*_{PERF} instead of *zhe*_{PROG} and *zhe*_{DUR}. The division of *zhe*_{PROG} and *zhe*_{PERF} can also be used to support my analysis of *ta*²¹.

At the end of this chapter, I provide some data from historical texts which show that *zhe* has evolved from an imperfective marker to a perfective marker, and the function as a perfective marker disappears, while the element *liǎo* ‘complete’ evolved into the verb final perfective marker *le*. Historically, *tau*²¹ and *ta*²¹ are cognates of *zhe*, what is different is that *ta*²¹ keeps the functions as a progressive and perfective marker. It can be seen as an inheritance of earlier phases in the historical development of Chinese.

Based on the above I came to the conclusion that the cases of Mandarin *zhe* and Xùpǔ *tau*²¹, support my analysis of *ta*²¹ in Chángshā.

5.5 Significance and further research

The proposed analysis is significant in that it provides a novel perspective to deal with the cases of combination of particles and on the one hand and the multifunctionality of individual aspect markers appearing in different types of dialects in Xiāng on the other. First, the combination of particles is quite common in other varieties of Xiāng and in the previous literature, they are treated either as one unit (e.g. *tau*²¹... *tsai*⁴¹ in Xùpǔ), or as different particles with the same functions (e.g. *ka*⁴¹... *ta*²¹ in Chángshā). As to the multifunctionality of aspect particles, that is generally attributed to the semantic properties of predicates: different predicates lead to a different function for one and the same particle. The present analysis shows, however, that it is more insightful to analyze these facts differently. First, the combination of aspect particles is best analyzed as involving an aspectual marker plus an additional element that is needed to help in licensing the event argument. The multifunctionality of one element is analyzed as a case of homonymy: two elements with the same form which occupy different positions in the structure,

each position associated with a different function. In this way, the present thesis will stand as a contribution to the development of the analysis of the morpho-syntax of aspect in Xiāng.

The present analysis is also significant for Inner aspect in Mandarin and other languages as well. The idea that the Inner aspect in Mandarin is a three-layered structure as established by Sybesma (2017) has provided a nice account for the differences of the predicate *wán* 'finish' between *chī wán yíge píngguǒ* 'finish an apple' and *cā wán kètīng* 'finished cleaning the living room'. More importantly, it has provided a different way to explain the difference between accomplishments and achievements. The present research is also significant in providing more evidence to support Sybesma's theory. What I have found is that in Mandarin, in most cases Asp2 position is empty, while in Xiāng it is mostly filled. See the corresponding sentences in (4).

- (4) a. Zhangsan kàn wán le nà běn shū. (Mandarin)
 read finish PERF that CL book
 'Zhangsan read that book(the whole book).'
- b. Tsan³³san³³ kʰan⁴⁵ oŋ¹³ ka⁴¹ ta²¹ la⁴⁵ pən⁴¹ xu³³.
 read finish KA PERF that CL book
 'Tsansan read that book (the whole book).' (Chángshā)

(4) is a resultative construction. The predicate *wán/oŋ*¹³ 'finish' is used to indicate the endpoint of the event. What is different is that in Chángshā an extra element, *ka*⁴¹, is used.

However, there is no doubt that there are many more questions which need to be considered with respect to Aspect in Xiāng and Chinese more generally. One of these is why the development of the *liǎo* to verbal-*le* has not occurred in Chángshā. Note that it is quite common to see the cognate of *liǎo* in Xùpǔ (*lia*³³) and many other Xiāng dialects. It is also not clear how *ka*⁴¹ in Chángshā developed. All these questions will be the subject of our further investigation.

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Samenvatting in het Nederlands (Summary in Dutch)

Deze dissertatie onderzoekt de morfosyntaxis van het aspectstelsel van het Chángshā dialect van het Xiāng Chinees. Xiāng is een van de tien subfamilies van het Chinees (naast Xiāng zijn dit het Mandarijn, Gà, Wú, Yuè, Hakka, Mǐn, Pínghuà, Jīn en Huī). Ik presenteer een volledige beschrijving en analyse van het aspectstelsel van het Chángshā Xiāng dialect. Deze analyse is gebaseerd op algemene theorieën over “Inner” en “Outer” aspect, en de interactie daartussen, met het doel bij te dragen aan verdere ontwikkeling van deze algemene theorieën.

Het meeste werk dat is verschenen over aspect in het Xiāng betreft een vergelijking tussen het Mandarijn en het Xiāng, en gaat niet in op de exacte eigenschappen van dit aspectstelsel vanuit een meer algemeen perspectief. Een voorbeeld is het uitdrukken van aspectuele betekenis. Er is weinig aandacht geweest voor het feit dat één aspect-markeerder gebruikt kan worden voor meerdere betekenissen of dat soms meerdere aspect-markeerders nodig zijn om één betekenis uit te drukken. Daarom willen wij het aspectstelsel van het Chángshā (en Xiāng in het algemeen) beter beschrijven en dieper analyseren.

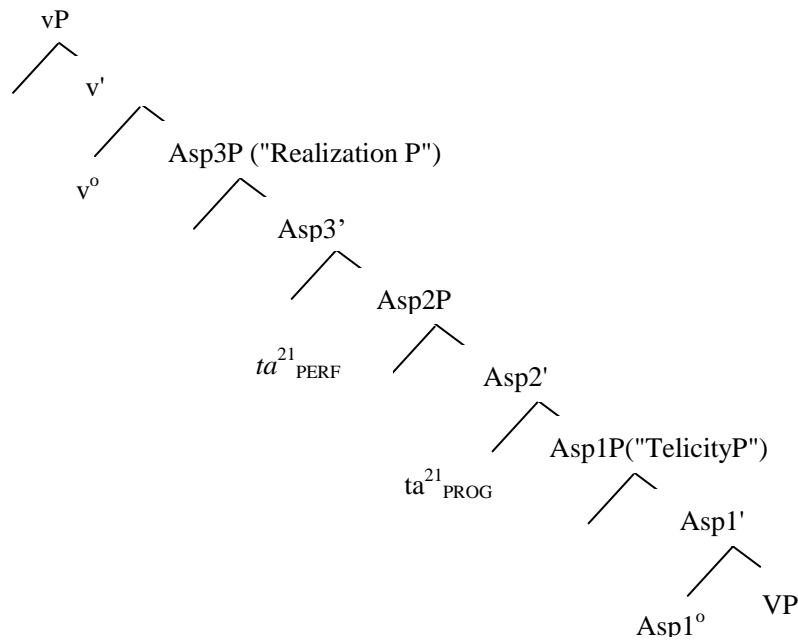
In deze dissertatie ga ik dieper in op twee aspect-partikels, *ta*²¹ en *ka*⁴¹. De eerste van deze twee partikels wordt gebruikt voor de realisatie van twee aspect-types die meestal als verschillend gezien worden: imperfectief (of zelfs progressief) aspect en perfectief aspect. Het tweede partikel, *ka*⁴¹, wordt meestal als perfectief partikel beschouwd, maar wordt meestal vergezeld door *ta*²¹.

Op basis van deze observaties formuleer ik de volgende onderzoeksvragen in mijn dissertatie:

- a) Wat is de distributie en interpretatie van *ta*²¹?
- b) Hoe kunnen we verklaren dat in het Xiāng, of in ieder geval in het dialect van Chángshā, hetzelfde partikel gebruikt kan worden om verschillende soorten aspectuele betekenis uit te drukken?
- c) Wat is de distributie en interpretatie van *ka*⁴¹?

Ik geef eerst een analyse van de distributie en interpretatie van ta^{21} . Er zijn twee partikels die dezelfde morfologische vorm hebben: ta^{21}_{PERF} en ta^{21}_{PROG} . Het eerste partikel markeert een perfectief en de tweede vorm markeert progressief aspect. Ik geef aan hoe ta^{21}_{PERF} en ta^{21}_{PROG} onderscheiden kunnen worden: het verschil tussen de twee is dat ta^{21}_{PERF} syntactisch hoger gesitueerd is dan ta^{21}_{PROG} . ta^{21}_{PERF} betreft “Inner” aspect maar wordt geïnterpreteerd in “Outer” aspect; ta^{21}_{PROG} bezet ook een positie in “Inner” aspect, maar lager dan ta^{21}_{PERF} (ik werk binnen Sybesma’s 2017 framework, waarin drie niveaus van Inner aspect aangenomen worden), zoals in (1):

(1)



In mijn analyse volg ik Tsai (2008) in de aannames dat (i) een *event*-variabele syntactisch gelicenseerd moet worden; (ii) syntactische verankering van *tense* een manier is om de *event*-variabele te licenseren; in het Engels is *tense* (T) overtuigend en daarom is T sterk genoeg om de *event*-variabele te licenseren terwijl in het Mandarijn T hiervoor te zwak is; om een effectieve licenser te zijn moet T op de een of andere wijze geassisteerd worden.

In de geest van Tsai's werk stel ik voor dat, hoewel ta^{21}_{PERF} zelf niet fysiek aanwezig is in “Outer” aspect, dit partikel wel in relatie staat tot “Outer” aspect, zodat het T kan versterken zodat T de *event*-variabele kan licenseren. Dit verklaart waarom ta^{21}_{PERF} alleen kan staan, of, met andere woorden, waarom het geen ander materiaal nodig heeft. Dit is niet het geval voor ta^{21}_{PROG} , dat lager is gesitueerd dan ta^{21}_{PERF} . Omdat dit partikel verder weg staat van “Outer” aspect en geblokkeerd wordt door perfectief aspect, kan het T niet versterken, met als gevolg dat het *event*-argument niet gelicenseerd kan worden. Om de zin grammaticaal te maken zijn andere elementen nodig om T te helpen in zijn functie van licenser. Dit verklaart waarom ta^{21}_{PROG} altijd vergezeld moet worden door ander materiaal, en ta^{21}_{PERF} niet. Ander materiaal zoals modale werkwoorden/negatie, andere aspectuele markeerders, *event* coordinatie, *event* subordinatie, en counterfactuals, genoemd door Tsai, zijn ook mogelijk in het Chángshā. Zie de voorbeelden in (2).

- (2) a. $t^h a^{33}$ mau^{21} $k^h an^{45}$ ta^{21} $tiən^{45} si^{41}$.
 3SG NEG kijken PROG TV
 'Hij kijkt geen TV.'
 b. $t^h a^{33}$ $k^h an^{45}$ ta^{21} $tiən^{45} si^{41}$.
 3SG kijken PERF TV
 'Hij heeft geen TV gekeken.'

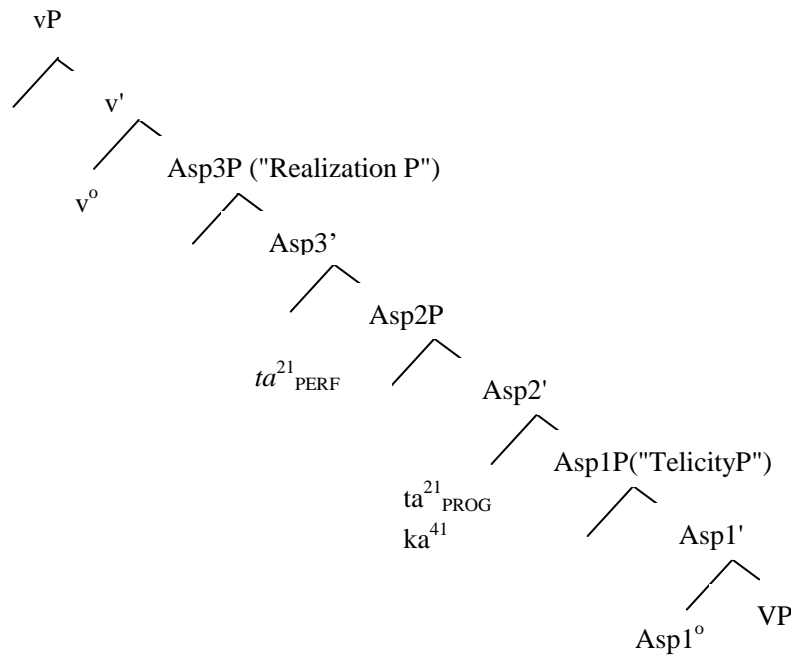
In (2a) kan ta^{21} alleen als progressief geïnterpreteerd worden, terwijl in (2b), waar de negatie ontbreekt, geen interpretatie van progressief aspect mogelijk is. Zoals we opgemerkt hebben, is de interpretatie van (2a) niet eenvoudig te verklaren indien ta^{21} alleen als een markeerder van het perfectief opgevat wordt: het is dan niet duidelijk waarom in een negatieve constructie de perfectief-markeerder een progressieve betekenis krijgt (en, vanuit een oogpunt van de Chinese taalkunde in het algemeen, waarom de perfectief-markeerder überhaupt aanwezig is, aangezien deze normaliter in complementaire distributie met negatie verschijnt). Nu we ta^{21}_{PROG} en ta^{21}_{PERF} onderscheiden hebben, kan de observatie in (2a) inzichtelijk verklaard worden: in (2a) wordt ta^{21} als een progressief-markeerder gebruikt. De negatie mau^{21} ‘niet hebben’ kan het *event* argument licenseren (Tsai 2008:681).

Naast het idee dat ta^{21}_{PROG} een progressief-markeerder is die één van de Inner aspect posities bezet, wijs ik op het feit dat er nog een andere progressief-markeerder is in het Xiāng, namelijk in Outer aspect positie. Er zijn dus twee progressief-markeerdere: de ene is ta^{21}_{PROG} en de andere is het preverbale $tsai^{21}ko^{24}$. Het verschil tussen ta^{21}_{PROG} en $tsai^{21}ko^{24}$ is dat de eerste in Inner, en de tweede in Outer aspect gesitueerd is. Het gebruik van $tsai^{21}ko^{24}$ resulteert in een betekenis van aan de gang zijn, terwijl ta^{21}_{PROG} zowel aan de gang zijn als continuering aanduidt. Een ander verschil is dat ta^{21}_{PROG} altijd vergezeld moet worden door ander lexicaal materiaal en $tsai^{21}ko^{24}$ niet.

Zoals vermeld werd ka^{41} in eerder onderzoek beschouwd als een markeerder van het perfectief. In deze dissertatie wordt echter gesteld dat ka^{41} niet als zodanig gezien moet worden. Het belangrijkste argument hiervoor is dat de distributie van dit partikel aan veel meer beperkingen onderhevig is: het verschijnt bijvoorbeeld alleen in de context van telische gebeurtenissen. Mijn suggestie is dat ka^{41} , vanuit een descriptief oogpunt, een reeds aanwezig eindpunt verdubbelt, zodat het dit eindpunt definitief maakt. Op basis van dit inzicht onderzoek ik de mogelijkheid om ka^{41} niet als perfectief-markeerder te beschouwen, maar om dit in de positie te situeren die als Asp2⁰ (de “phase complement” positie) aangeduid wordt in de boomstructuur in het voorstel van Sybesma (2017), zoals in (1) (herhaald in (3)), waar er drie aspectuele lagen zijn: Asp1P, welke teliciteit aanduidt; Asp3P, welke aangeeft of een gebeurtenis wel of niet is gerealiseerd. Indien Asp2P gevuld is, is dit om zeker te stellen dat het proces dat voorafgaat aan het eindpunt in het hoofd van Asp1P niet beschikbaar is voor verdere syntactische operaties. Merk echter op dat ik ook stel dat de functie van Asp2P in het Chángshā niet afhankelijk is van of deze leeg of gevuld is, maar ook waarmee het gevuld is. Dit kan een element zijn dat de gebeurtenis onzichtbaar maakt voor syntactische operaties, maar het kan ook een tegengestelde functie hebben, namelijk door aan te geven dat een actie gepresenteerd wordt als aan de gang. Twee van zulke elementen verschijnen in het Chángshā: ka^{41} wordt gebruikt om verdere toegang tot de activiteit voor het lexicale eindpunt te blokkeren (bijvoorbeeld, een dergelijke gebeurtenis kan geen progressief aspect dragen), terwijl ta^{21}_{PROG} de activiteit in kwestie onderstreept en aangeeft dat de gebeurtenis aan de gang is. ka^{41} en

ta^{21}_{PROG} bezetten dezelfde positie en komen nooit samen voor, zoals (3) laat zien:

(3)



De voorbeelden in (4) laten zien dat ka^{41} gebruikt wordt om een eindpunt te verdubbelen en te verhinderen dat het proces dat voorafgaat aan het eindpunt in het hoofd van Asp1 een rol kan spelen in verdere syntactische operaties.

- (4) a. $t^h a^{33}$ $t\check{c}ia^{24}$ (ka^{41}) ta^{21} san^{33} $t\check{s}a^{24}$ pin^{13} ko^{41} .
 3SG eten KA PERF drie CL appel
 'Hij heeft drie appels gegeten.'
- b. $t^h a^{33}$ pa^{41} san^{33} $t\check{s}a^{24}$ pin^{13} ko^{41} $t\check{c}ia^{24}$ $*(ka^{41})$ ta^{21} .
 3SG BA drie CL appel eten KA PERF
 'Hij heeft drie appels gegeten.'
- c. Tsansan xy^{33} $\{ka^{41} ta^{21} / *(ka^{41}) ta^{21}\}$.
 verliezen KA PERF
 'Tsansan heeft (het spel) verloren.'

In (4a) ka^{41} is optioneel, terwijl in (4b) en (4c) ka^{41} verplicht is. We verklaren het verschil tussen (4a) en (4b-c) op basis van het gebruik van ka^{41} : ka^{41} is verplicht in de *ba*-constructie (4b) en in de resultatief (4c), maar niet in *accomplishments with a bounded object* (4a).

Het antwoord hangt samen met de eigenschappen van de constructies in deze gevallen. Merk op dat in *accomplishments with a bounded object* en resultatieven het eindpunt compositioneel is, terwijl het in prestaties inherent is. In veel talen, waaronder het Mandarijn en het Chángshā, is het mogelijk om voor *accomplishments with bounded objects* of resultatief-constructies progressief aspect te gebruiken (zoals (5) laat zien), maar is het onmogelijk om prestaties op die manier te presenteren. Deze eindpunten kunnen niet verwijderd worden. Als een predicaat zonder eindpunt onmogelijk is, is ka^{41} verplicht.

- (5) a. $t^h a^{33}$ $tsai^{21} ko^{24}$ $t^h an^{45}$ $t\phi^h en^{33}$ $i^{33} fu$.
 3SG PROG strijken plat clothes
 'Hij strijkt de kleren plat.'
 b. $t^h a$ $tsai^{21} ko^{24}$ $f\tilde{a}^{24}$ $t\tilde{en}^{21}$ $t^h a$ ti $t\phi i^{45} t\phi^h \phi^{33}$.
 3SG PROG starten rijden 3SG SUB auto
 'Hij start de auto.'

Het gebruik van de *ba*-constructie hier is veelzeggend. Hoewel het eindpunt niet inherent is, in de zin van een prestatie, is de aanwezigheid van *ba* hier structureel noodzakelijk: zonder eindpunt is er geen *ba*-constructie. En net als bij prestaties, maar niet bij non-*ba*-constructies, kunnen *ba*-zinnen niet met progressief aspect verschijnen. Het eindpunt kan niet onderdrukt worden en ka^{41} is verplicht aanwezig. In alle andere gevallen kan het eindpunt, dat wel aanwezig is, onderdrukt worden en is ka^{41} niet verplicht.

Tenslotte wijs ik erop dat in Chángshā (en Xiāng in het algemeen) alle drie de Inner aspect posities lexicaal gerealiseerd kunnen worden. ta^{21}_{PERF} bezet Asp3^o; ka^{41} en ta^{21}_{PROG} bezetten Asp2^o, en een lexicale resultatief zou in de Asp1^o positie gerealiseerd kunnen worden.

Het primaire belang van deze dissertatie ligt in de beschrijving en analyse van aspect in het Xiāng, maar ook in de meer algemene zin dat het

analyses ondersteunt waarin Inner aspect een rol speelt. Verder bevestigt deze dissertatie de opvatting dat niet alle Chinese talen hetzelfde zijn. Hoewel de basis van de analyse hetzelfde is, worden de posities in de structuur op verschillende wijzen gerealiseerd. Hoewel, bij wijze van voorbeeld, het Mandarijn een *phase complement* heeft, heeft het geen element vergelijkbaar met *ka*⁴¹ in het Xiāng. En terwijl het Xiāng een element heeft dat zowel perfectief als progressief/duratief kan uitdrukken, gebruikt het Mandarijn daarvoor twee elementen: respectievelijk *le* en *zhe*.

Summary

This thesis investigates the morpho-syntax of the aspectual system in one variety of Xiāng (namely: Chángshā), which is one of the ten sub-families of Chinese (which are Mandarin, Xiāng, Gàn, Wú, Yuè, Hakka, Mǐn, Pínghuà, Jīn, and Huī). In this context, I provide a comprehensive description and analysis of the aspect system of the Xiāng variety of Chángshā. I conduct the analysis from the perspective of general theories on Inner and Outer aspect, and the interaction between them, with the intention to contribute to the development of these more general ideas.

Most of the previous works on aspect in Xiāng are concerned with the comparison of the differences between Mandarin and Xiāng, rather than recognizing the idiosyncratic properties in a more general sense or in their own right. Take the expression of aspectual meaning as an example. That one aspect marker is used to express more than one meaning or that more than one element is sometimes needed to express an aspect type has aroused very little attention. It is our purpose to provide an analytical account of the aspectual system in Chángshā (and Xiāng more generally).

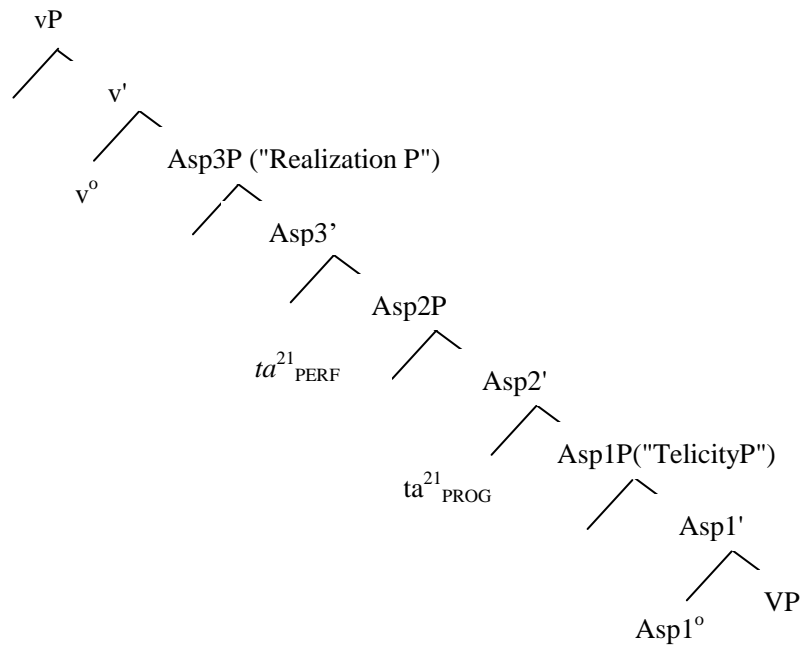
In this thesis, I focus my investigating on two aspect particles, ta^{21} and ka^{41} . The former, ta^{21} , is involved in the expression of two types of aspect, which are normally thought of as quite different, imperfective (or even progressive), and perfective; the latter, ka^{41} , is a particle that is often characterized as a perfective particle, but most of the time it is accompanied by ta^{21} .

In view of these observations, I formulate the following questions to be dealt with in this thesis:

- a) What is the interpretation and distribution of ta^{21} ?
- b) How can we account for the observation that in Xiāng, or in any case in the Chángshā variety of it, that the same particle can be involved in the expression of different aspectual meanings?
- c) What is the interpretation and distribution of ka^{41} ?

I first provide an analysis of the interpretation and distribution of ta^{21} . I point out that there are two particles which share the same morphological form: ta^{21}_{PERF} and ta^{21}_{PROG} , the former is a perfective and the latter is a progressive marker. I then provide an analysis to disambiguate ta^{21}_{PERF} from ta^{21}_{PROG} by pointing out that the difference between ta^{21}_{PERF} and ta^{21}_{PROG} lies in the fact that ta^{21}_{PERF} is syntactically higher than ta^{21}_{PROG} . ta^{21}_{PERF} is located in an Inner aspect position but interpreted in Outer aspect; ta^{21}_{PROG} is also located in Inner aspect position, lower than ta^{21}_{PERF} (I adopt Sybesma's (2017) structure that involves three layers in Inner aspect, as in (1)).

(1)



In my analysis, I follow Tsai (2008), in assuming that i) an event variable needs to be syntactically licensed; ii) syntactic tense anchoring is a way of licensing the event variable; in English, tense (hence T) being overt, is strong enough to license the event variable, while in Mandarin, it is too weak to do so; to be an effective licenser, T needs to be supported one way or another.

In the spirit of Tsai's work, I propose that ta^{21}_{PERF} , though not physically in Outer aspect itself, is in a relation with Outer aspect such that it can strengthen T so that the latter can license the event variable. This explains why ta^{21}_{PERF} can stand alone in the sense that it need not be accompanied by other material. This is different for ta^{21}_{PROG} . ta^{21}_{PROG} is located lower than ta^{21}_{PERF} . Since it is too far away from Outer aspect, blocked by the perfective aspect, it cannot strengthen T as a result of which the event argument is not licensed ("brought out" in Tsai's terms). Note that even if the head position of the highest AspP in inner aspect is not filled, the position/projection is still there. To salvage the sentence, other elements need to be present to help T to do its

licensing job. That explains why ta^{21}_{PROG} is always accompanied by other material, unlike ta^{21}_{PERF} . Other material, like modals/negation, certain aspectual markers, event coordination, event subordination, counterfactuals mentioned by Tsai also work with the use of ta^{21}_{PROG} in Chángshā. This is illustrated in (2).

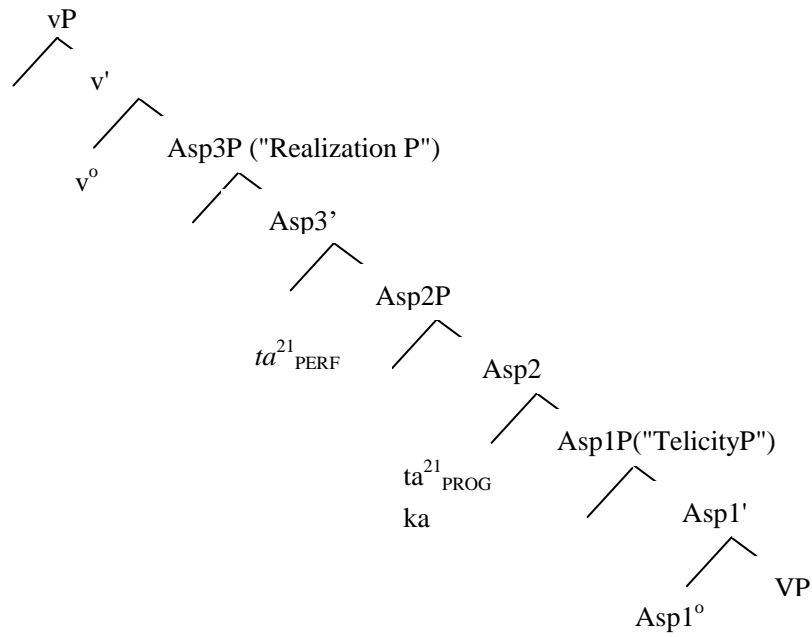
- (2) a. $t^h a^{33}$ mau^{21} $k^h an^{45}$ ta^{21} $tiən^{45} si^{41}$.
 3SG NEG watch PROG TV
 'He is not watching TV.'
 b. $t^h a^{33}$ $k^h an^{45}$ ta^{21} $tiən^{45} si^{41}$.
 3SG watch PERF TV
 'He watched TV.'

ta^{21} in (2a) can only have a progressive reading, while in (2b), without the negative marker, the progressive reading is not available. As we noted, if ta^{21} is exclusively treated as a perfective marker, the interpretation of (2a) is not easy to explain: it is not clear why in a negative construction the perfective marker must produce the progressive meaning (and in the greater context of Chinese linguistics it is not clear why the perfective marker would still be there at all, since it is generally in complementary distribution with the negative marker). Now that we have distinguished ta^{21}_{PROG} from ta^{21}_{PERF} , the observation in (2a) can be nicely accounted for. That is, in (2a), ta^{21} is used as a progressive marker. The negative marker mau^{21} 'not have' can license the event argument (Tsai 2008:681).

Aside from arguing that ta^{21}_{PROG} is a progressive marker occupying one of the Inner aspect positions, I point out that there is another progressive marker, in Outer aspect position. That is, we have two progressive markers in Xiāng. One is ta^{21}_{PROG} , the other is the preverbal $tsai^{21} ko^{24}$. What differentiates ta^{21}_{PROG} from $tsai^{21} ko^{24}$ is that the latter is located in Outer aspect, while ta^{21}_{PROG} is in an Inner aspect position. $tsai^{21} ko^{24}$ focuses on the meaning of ongoingness, while ta^{21}_{PROG} focuses on the meaning of both ongoingness and continuation. Another difference is that, unlike $tsai^{21} ko^{24}$, ta^{21}_{PROG} must always be accompanied by other material.

As mentioned, ka^{41} was treated as a perfective marker in the previous literature. In the present thesis however, it is argued that ka^{41} should not be treated as a perfective marker. The main reason is that its distribution is much more restricted: it only appears in telic events, to give one example. I suggest that descriptively, ka^{41} doubles the already existing endpoint and that it does so to make the endpoint definitive. Given the function of ka^{41} , instead of treating ka^{41} as a perfective marker, I explore the possibility of locating it in the position labeled as $Asp2^0$ in the tree structure (the “phase complement” position) using the frame work from Sybesma (2017), as in (1), repeated in (3), where there are three aspect layers: $Asp1P$, indicating telicity; $Asp3P$, indicating whether an event is realized or not. The function of $Asp2P$, if filled, is to make sure that the process that precedes the endpoint in the head of $Asp1$ is not available for further syntactic operations. Note, however, that I also point out that the function of $Asp2P$ in Chángshā relies not on whether it is filled (or not), but (also) by what it is filled with. It can be an element that is used to block the event from being syntactically accessible, but it can also be an element which is, on the contrary, used to indicate that an action presented is ongoing. It happens that two such elements are observed in Chángshā. ka^{41} is used to block further access to the activity preceding the lexical endpoint (for example, such event cannot be present in the progressive), while ta^{21}_{PROG} in contrast focuses on the activity in question and indicates that the action presented is ongoing. ka^{41} occupies the same position as ta^{21}_{PROG} . These two markers never co-occur, see (3). What is different is that ka^{41} is added to (3).

(3)



That *ka*⁴¹ is used to double an end point and make sure that the process that precedes the endpoint in the head of *Asp1* is not available for further syntactic operations is illustrated in (4).

- (4) a. t^ha³³ tɕia²⁴ (ka⁴¹) ta²¹ san³³ tsa²⁴ pin¹³ ko⁴¹.
 3SG eat KA PERF three CL apple
 'He ate three apples.'
- b. t^ha³³ pa⁴¹ san³³ tsa²⁴ pin¹³ko⁴¹ tɕia²⁴ *(ka⁴¹) ta²¹.
 3SG BA three CL apple eat KA PERF
 'He ate three apples.'
- c. Tsansan xy³³ {ka⁴¹ ta²¹ / *(ka⁴¹) ta²¹}.
 lose KA PERF KA PERF
 'Tsansan lost (the game).'

ka^{41} in (4a) is optional, while in (4b) and (4c), ka^{41} is obligatory. We have to explain the difference between (4a) and (4b)-(4c) in terms of the use of ka^{41} , where ka^{41} is obligatory in the *BA*-construction (4b) and achievements (4c), but not in accomplishments with a bounded object (4a).

The answer is related to the properties of constructions in these cases. Note that in accomplishments with a bounded object and resultatives, the endpoint is compositional, while in achievements it is inherent. Note that, in many languages, including Mandarin and Chángshā, it is possible to present accomplishments with bounded objects or resultative constructions in the progressive (as illustrated in (5)), but it is impossible to present achievements in the progressive. These endpoints cannot be stripped off. When it is impossible to have the predicate without the endpoint, ka^{41} is obligatory.

- (5) a. $t^h a^{33}$ $tsai^{21} ko^{24}$ $t^h an^{45}$ $t\phi^h \partial n^{33}$ $i^{33} fu$.
 3SG PROG iron flat clothes
 'He is ironing the clothes flat.'
 b. $t^h \bar{a}$ $tsai^{21} ko^{24}$ $f\bar{a}^{24}$ $t\partial n^{21}$ $t^h \bar{a}$ ti $t\phi i^{45} t\phi^h \partial^{33}$.
 3SG PROG start move 3SG SUB car
 'He is starting his car.'

The *BA*-construction is telling here. Although the endpoint is not inherent in the sense it is in achievements, in this case the presence is required structurally: without an endpoint, there is no *BA*-construction. And just like achievements, but unlike their non-*BA*-counterparts, *BA*-sentences are incompatible with the progressive. The endpoint cannot be lifted and ka^{41} is obligatory. In all other cases the endpoint, although it is there, can be lifted and ka^{41} is not obligatory.

In the end, I point out that in Chángshā and Xiāng in general, all three Inner aspect positions can be lexically realized. ta^{21}_{PERF} occupies $Asp3^0$; ka^{41} and ta^{21}_{PROG} occupies $Asp2^0$; and a lexical result predicate may be located in $Asp1^0$ position.

The significance of this thesis is meant to lie in the description and analysis of aspect in Xiāng, but also more generally in that it will support the analyses in which Inner aspect plays a role. Furthermore, the thesis underscores the claim that Chinese languages are not all the same. Although the basic structure is the

same, the way the different positions in the structure are realized is different. For instance, although Mandarin has “phase complements” to fill Asp2⁰, it does not have an element like Xiāng *ka*⁴¹. Also, whereas this language has one element that can express both perfective and progressive/durative aspect, *ta*²¹, Mandarin uses two different elements for these purposes, *le* and *zhe* respectively.

Summary in Chinese/中文摘要

本研究旨在调查湘方言变体（具体说长沙方言）体貌的形态和句法特征。前者是汉语十大方言（普通话、赣、湘、吴、粤、客家、闽、平话以及徽语）。在这样一个背景之下，我们对湘语长沙话的体貌进行了全面的描写和分析。我们的研究立足于外部体和内部体的一般理论及二者之间的相互作用，目的在于对这些理论做出贡献。

过去关于湘方言体研究的文献大多关注湘语和汉语之间的比较，而不太关注湘语本身或者从更广阔的视角去考察湘语体特征。以体貌意义的表达为例。湘方言广泛出现的同一个体标记被用来表示一种以上的意义，或者一个以上的体标记用来表示同一种体貌意义这样的现象很少受到人们的关注。我们的研究目的在于对长沙方言（更广泛意义上而言，湘方言）的体貌系统中这种特质进行分析和解释，并进而对整个湘语体貌系统进行全面的分析和研究。

本研究中，我们主要关于两个体标记词 ta^{21} 和 ka^{41} ，分别记作“哒”和“咖”的用法。“哒”能用来表示两种不同的体意义：完成体和非完成体；“咖”常被认为是一个完成体标记，但大多数时候常常需要和“哒”搭配使用，否则会引起不合语法现象。

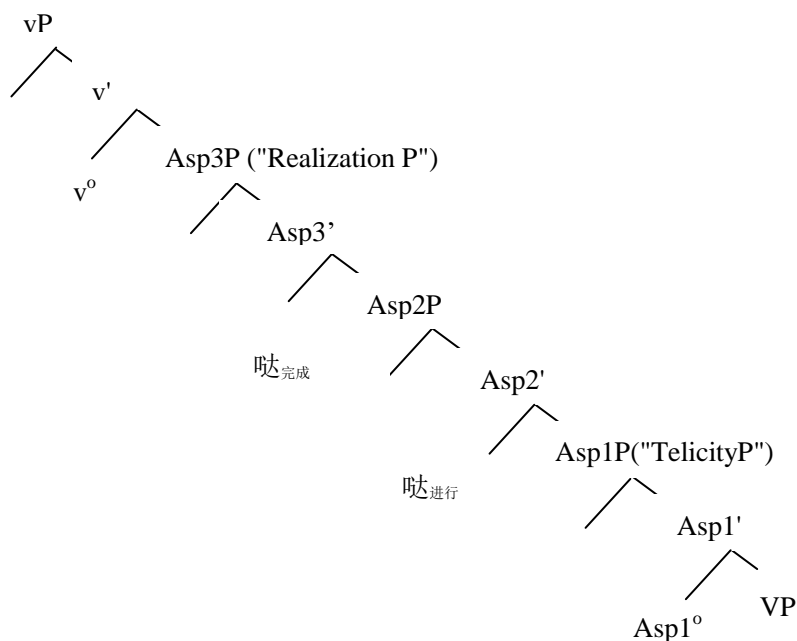
根据这些观察，我们在本研究中提出下面这些问题：

- i) “哒”的语义特征和句法分布如何解释？
- ii) 我们如何解释湘方言，或者说长沙方言中，同一个体标记能够用来表示不同的体意义的现象？
- iii) 我们如何解释“咖”的语义特征和句法分布？

研究中，我们首先对“哒”的语义特征和句法分布进行分析。与传统方法不同，我们指出有两个体标记，共享同一个形式。我们将其区分为“哒_{完成体}”和“哒_{进行体}”，前者是一个完成体标记，后者是一个进行体标记。然后，我们分析指出“哒_{完成体}”和“哒_{进行体}”的区别在于表示完成体意义的“哒”句法位置高于表示进行体意义的“哒”，并由此解释，“哒”在哪些情况下表示完成体意义，在哪些情况下，“哒”表示进行体意义。“哒_{完成体}”位于内部体位置，但是在外部体位置获得语义解释；“哒_{进行体}”同样位于内部体位置，不过，低于“哒_{完成体}”。分析过程中，我们主要借用 Sybesma's (2017) 关于汉语体貌系统的理论，后者认为汉语

内部体是一个三层次的结构。我们指出，这一点上，长沙方言与汉语是一致的。根据 Sybesma's (2017) 汉语体貌内部体结构表示如 (1)。

(1)



在我们的分析中，我们同时也借用 Tsai (2008)的一些看法，认为， i) 事件变量需要在句法上获得允准。ii) 句法意义上的时制锚定是允准事件变量的方式之一。英语的时制具有显性的形态标记，其本身很“强”，可以允准事件变量；而汉语普通话里，没有显性的时制标记，相对来说，其时制比较“弱”，不能用来充当有效允准语，因此汉语时制需要其他方式来得到允准。

在上述这些理论基础上，我们提出，“哒_{完成体}”尽管没有处于外部体位置，但是与外部体之间关系密切，事实上它在外外部体上获得语义解释，因此它能够用来加强时制，以便后者能够允准事件变量。这可以解释为什么“哒_{完成体}”能够独立使用，而不需要其他成分搭配。这一点上，“哒_{进行体}”与“哒_{完成体}”不同。“哒_{进行体}”的句法位置比“哒_{完成体}”低。由于其离外部体太远，中间受到完成体的阻挡，因此不能用来“加强”时制，以便事件论元获得允准（或

者用 Tsai (2008) 的话来说, 无法得到“拼读”)。值得说明的是, 即使内部体中最高位置上的中心语没有被填充(或者说投射), 这个位置依然存在。为了使句子合法, 我们需要借助其他的成分来帮助时制完成允准事件变量的工作。这就解释了为什么“哒_{进行体}”不能与“哒_{完成体}”一样独立使用, 而总是需要其他成分搭配使用。Tsai (2008) 所提到情态动词、否定动词、体标记词、并列事件、从属事件等所有这些用来帮助句子实现时制锚定的方法在长沙方言都同样有效, 也正是这些成分的出现, 长沙方言中“哒_{进行体}”才能实现其进行体标记功能。具体例句见(2)。

- (2) a. 他有看哒电视。他没在看电视。
b. 他看哒电视。 他看了电视。

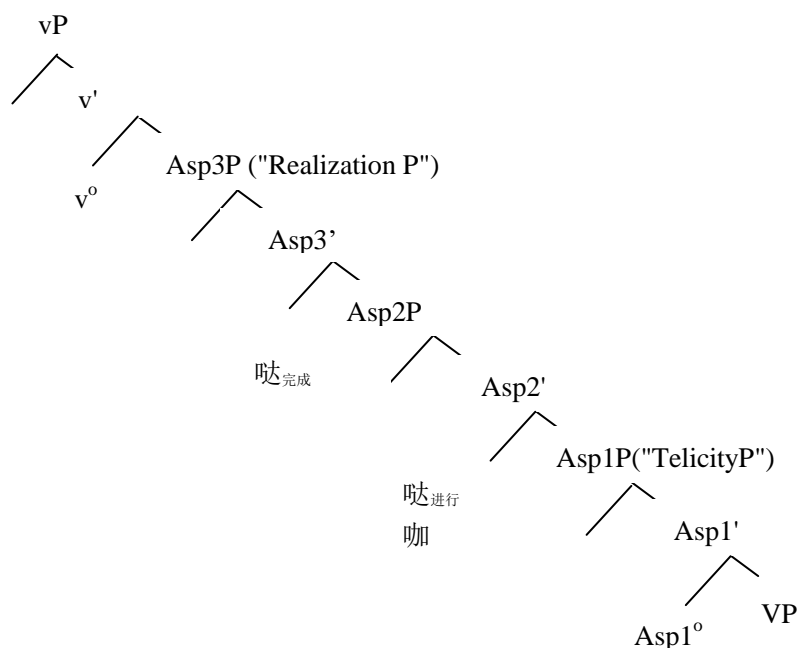
“哒”在(2a)里只能表示进行体语义。而在(2b)里, 句子中没有出现否定副词, 句子不能表示动作正在进行的意义。正如我们已经提到的那样, 如果我们一律将“哒”看作是一个完成体标记, (2a)的语义特征很难解释。我们不清楚为什么含否定副词的结构里, 一个完成体标记必须产生进行体意义(并且从汉语来看, 我们更不清楚为什么完成体标记能够出现在这个句子中, 因为一般情况下完成体与否定副词呈互补分布。)现在我们将“哒_{进行体}”和“哒_{完成体}”区分开来, (2a)中的观察也就完全能得到合理解释。具体说, 该句子中“哒”根本就不是一个完成体标记, 而是一个进行体标记。否定标记“有”能够允准事件论元(Tsai 2008:681)。

除了提出“哒_{进行体}”可以用作进行体标记, 位于内部体位置之外, 我们认为长沙方言外部体中, 还存在另一个进行体标记: “在咯”, 后者位于动词前位置。这也就是说, 湘方言中存在两个进行体标记, 一个是“哒_{进行体}”, 另一个是动词前“在咯”。二者之间存在一定的句法和语义差异。“在咯”位于外部体位置; 而“哒_{进行体}”位于内部体位置。“在咯”着重表示动作正在进行; 而“哒_{进行体}”同时关注进行意义和持续意义。另外, 与“在咯”不同, “哒_{进行体}”总是需要其他成分搭配使用。

前面已经提到, 在先前文献中, “咖”也被当作一个完成体标记。而在我们的研究中, 我们认为“咖”不应该看作是一个完成体标记。主要原因是, “咖”的句法分布与“哒”相比更为复杂。例如, “咖”一般出现在终结点事件中。本研究中, 我们提出, “咖”用来“加倍”(Double)终结点意义, 使终结点意义明确、具体(Definitive)。鉴于“咖”的这个作用, 我们没有将“咖”看作是一个完成体标记, 而是将其看作一个内部体标记。在 Sybesma (2017)

基础上，我们提出“咖”位于内部体结构上 Asp2^0 （也就是人们常说的“阶段体”）位置。（1）重复如（3），不同的是，（3）里增加了“咖”。

(3)



在这个结构图上，内部体有三个层次： Asp1P 表示终结点意义， Asp3P 表示一个事件是否已经实现。 Asp2P 的功能相对来说比较复杂。其具体意义取决于该位置是否被填充。如果被填充，那么 Asp2P 表示 Asp1 里的中心语所表示的终结点不能再进行进一步的句法操作。否则，则可以。但是值得说明的是，我们同时指出，这一点上，长沙方言与汉语不同。在长沙方言中 Asp2P 的作用不仅取决于是否被填充，而且还取决于填充的具体成分。这个位置上所填充的成分可以用来阻挡进一步的句法操作，也可以是用来表示动作正在进行的成分。有意思的是，这两个成分在长沙方言中都有显性词汇表示。其中，“咖”用来阻挡进一步的句法操作；与其相反，“哒进行体”则用来表示所描述的动作正在进行。“咖”与“哒进行体”句法位置相同，二者从来不同时出现（见（3））。

“咖”用来“加倍”(Double)终结点意义,确保其上层中心语里的终结点不能在进行句法操作的这种用法可以通过(4)进行说明。

- (4) a. 他吃 (咖) 哒三只苹果。
 b. 他把三只苹果吃* (咖) 哒。
 c. 这次比赛他输/赢* (咖) 哒。

“咖”在(4a)里是具有可选性。而在(4b)和(4c)中则必须出现。我们必须解释(4a)与(4b)和(4c)中“咖”的用法。说明为什么“咖”在(4a)这样带有数量宾语的实现体事件中具有可选性,而在(4b)和(4c)中具有强制性。

我们认为这些问题的实质主要与这些结构特征有关。值得注意的是,在结果补语句和带有数量宾语的实现体动词所表示的句子中,事件的终结点是组合性的。而在达成体里,终结点意义却是内含的。同样值得关注的是,在许多其他语言包括普通话和长沙话中,带有数量宾语的实现体动词所表示的句子或结果补语句子可以表示为进行体(见(5)),而达成体动词表示的句子却不能。这些事件中的终结点不能被剥离(Be stripped off)。相对于终结点无法被剥离的句子,“咖”具有强制性。

- (5) a. 他在咯熨衣服。
 b. 他在咯发动他的汽车。

至于“把”字句,我们认为可以这样解释,尽管这种句式中的终结点意义与达成体动词中固有的终结点意义不一样,但是这种句式的结构本身使然:没有终结点,就没有“把”字结构。与达成体动词一样,但与非“把”字结构不同,“把”字结构与进行体不能兼容。其终结点不能被剥离。这些情形里,“咖”的使用具有强制性。在所有其他情形里,尽管含有终结点意义,但如果能被抽离,“咖”也就具有可选性。

研究最后,我们还指出,大体上来说,湘语长沙方言中内部体里的三个位置在词汇上都具有显性词汇表现。“哒_{完成体}”位于 Asp3° 位置;“咖”和“哒_{进行体}”位于 Asp2° 位置;表示结果意义的词汇可能位于 Asp3° 位置。

本研究的意义在于,我们对湘语长沙方言的体貌特征进行了描写和分析;而且更广泛意义上来说,本研究为认为内部体在体貌系统中发挥重要作用的分析提供了支持。并且,本研究还强调:汉语不都是一样的。尽管

基本的结构一样，但是同一结构上，不同位置上的句法实现方式并不相同。例如，普通话和湘语长沙方言中，表示“阶段完成”的成分必须在 Asp2° 上，但是普通话里没有湘语中的“咖”。而且湘语中有既表示完成体意义又表示进行/持续意义的“哒”，普通话却分别使用“了”和“着”这两个不同的标记。

Curriculum Vitae

Lu Man 鲁曼 was born in Yueyang city Hunan province, on the 16th of July 1969. She obtained her BA in Foreign Langue and literature at the university of Science and Technology in Xiangtan in 1993, and then went to the institute of Economy and Trading in Changsha, where she spent three years teaching English. In 1996, she enrolled as a master student in Zhongnan University in Changsha. She defended her MA thesis in translation theory in 1999. Since June 1999, she has been teaching English at the College of Foreign Languages in Hunan University in Changsha. In February 2007, she enrolled in the Master's Program of the Leiden University Center for Linguistics (LUCL) and defended her MA thesis in July 2008. In 2008 she started her PhD research as an external PhD student at LUCL, the results of which are reported in this dissertation.